

# DXA-C70

## SERVICE MANUAL

*US Model  
Canadian Model  
AEP Model  
UK Model  
E Model  
Australian Model  
Tourist Model*



This set is the Amplifier,  
cassette deck section  
in MHC-70 and FH-C7X.

Tape deck Section	Model Name Using Similar Mechanism		HCD-H61
			HCD-H61M
	Tape Transport Mechanism	DECK A	TCM-190RA12A
	Type	DECK B	TCM-190RB22A

### SPECIFICATIONS

#### Amplifier Section (For US, Canada)

Continuous RMS power output  
50 + 50 watts (6 ohms at  
40 Hz — 20 kHz, 0.9%  
THD) 65 + 65 watts  
(6 ohms at 1 kHz, 5%  
THD)

(For AEP, UK, German and Italy)

Continuous RMS power output  
40 + 40 watts (6 ohms at  
1 kHz, DIN)  
45 + 45 watts (6 ohms at  
1 kHz, 5% THD)

Music power output 110 + 110 watts  
(6 ohms at 1 kHz, 10%  
THD)

(For Australia)

Continuous RMS power output  
50 + 50 watts (6 ohms at  
1 kHz, 5% THD)

Peak music power output  
600 watts (4 speakers  
driven)

(For E, Saudi Arabia, Singapore and Tourist)

Peak music power output  
600 watts (4 speakers driven)

Continuous RMS power output  
50 + 50 watts (6 ohms at  
1 kHz, 5% THD)

Inputs  
MIX MIC (mini jack):  
sensitivity 1 mV,  
impedance 47 kilohms  
(Except US, Canada)  
PHONO IN (Phono jacks):  
sensitivity 3 mV,  
impedance 47 kilohms  
(AEP, UK, German, Italy)  
VIDEO IN (phono jacks):  
sensitivity 250 mV,  
impedance 47 kilohms  
(US, Canada, FH-C7X)  
MD/DAT IN (phono jacks):  
sensitivity 250 mV,  
impedance 47 kilohms

Outputs  
HEADPHONES  
(stereo minijack):  
accepts headphones of  
8 ohms or more

#### SPEAKERS:

accepts speakers or 6 to  
16 ohms

MD/DAT OUT (phono jacks):  
voltage 250 mV  
impedance 1 kilohm


#### Cassette Deck Section

Recording system 4-track 2-channel stereo  
(DOLBY NR OFF)  
Frequency response 40 — 13,000 Hz ( $\pm 3$  dB),  
using TYPE I cassette  
(Sony HF-S)  
40 — 14,000 Hz ( $\pm 3$  dB),  
using TYPE II cassette  
(Sony UX-S or UX)  
40 — 15,000 Hz ( $\pm 3$  dB),  
using TYPE IV cassette  
(Sony ES-IV) (US, Canada)  
(Sony METAL-S) (Except  
US, Canada)  
Wow and flutter 0.1% WRMS  $\pm$  0.3% (DIN)

Wow and flutter

Design and specifications subject to change  
without notice.

Dolby noise reduction manufactured under license from Dolby  
Laboratories Licensing Corporation.

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Laboratories Licensing Corporation.

MINI Hi-Fi COMPONENT SYSTEM  
**SONY**



## SAFETY CHECK-OUT

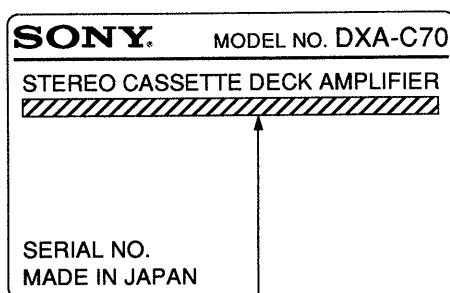
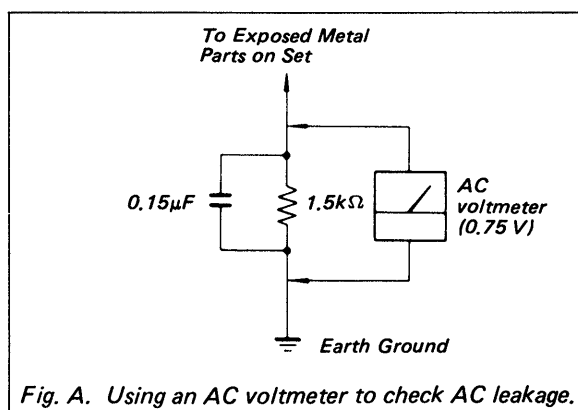
After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)



US model: AC: 120 V 60 Hz 135 W  
 Canadian model: AC: 120 V 60 Hz 145 W  
 AEP model: AC: 220—230 V ~ 50/60 Hz 135 W  
 German, Italian model: AC: 220—230 V ~ 50 Hz 135 W  
 E, Saudi Arabia, Singapore,  
 Australian, Tourist model: AC: 120/220/230—240 V ~ 50/60 Hz 165 W  
 UK model: AC: 240 V ~ 50 Hz

### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK OR DOTTED LINE WITH MARK ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

### ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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## SECTION 1 GENERAL

This section is extracted  
from instruction manual.

## Parts Identification





### Amplifier/Cassette Deck Section

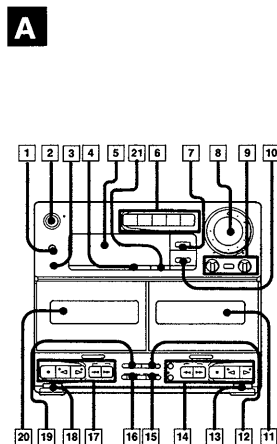
## Amplifier

- 1 HEADPHONES jack (stereo minijack)
- 2 SYSTEM POWER switch and ON/STANDBY indicator

The indicator remains lit as long as the AC power cord is connected to a wall outlet.
- 3 DISPLAY button
- 4 EFFECT button
- 5 Display window
- 6 Function buttons and indicators
  - VIDEO
  - TAPE
  - MD/DAT
  - CD
  - TUNER
- 7 PRESET button
- 8 VOLUME control
- 9 Dynamic Bass System (DBS) controls and indicator
  - LEVEL control
  - FREQ (frequency) control
- 10 P. FILE (Personal File) button

### Cassette Deck

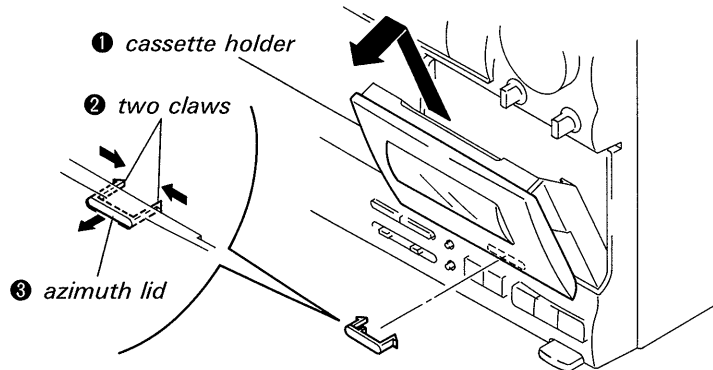
- 11 Cassette holder (deck B)
- 12 CD SYNCHRO button (49, 52)
- 13  Eject button (deck B)
- 14 Tape operation buttons (for deck B)
  - : Stop button
  - <: Forward play button and indicator
  - <: Reverse play button and indicator
  - AMS : Fast winding buttons
  - || PAUSE: Pause button and indicator
  - REC: Recording button and indicator
- 15 DOLBY NR (Dolby Noise Reduction) selector
- 16 DIRECTION mode selector
- 17 Tape operation buttons (for deck A)
  - : Stop button
  - <: Forward play button and indicator
  - <: Reverse play button and indicator
  - AMS : Fast winding buttons
- 18  Eject button (deck A)
- 19 HIGH SPEED DUBBING button
- 20 Cassette holder (deck A)
- 21 KARAOKE button (E, Saudi Arabia, Singapore, Australian, Tourist models)



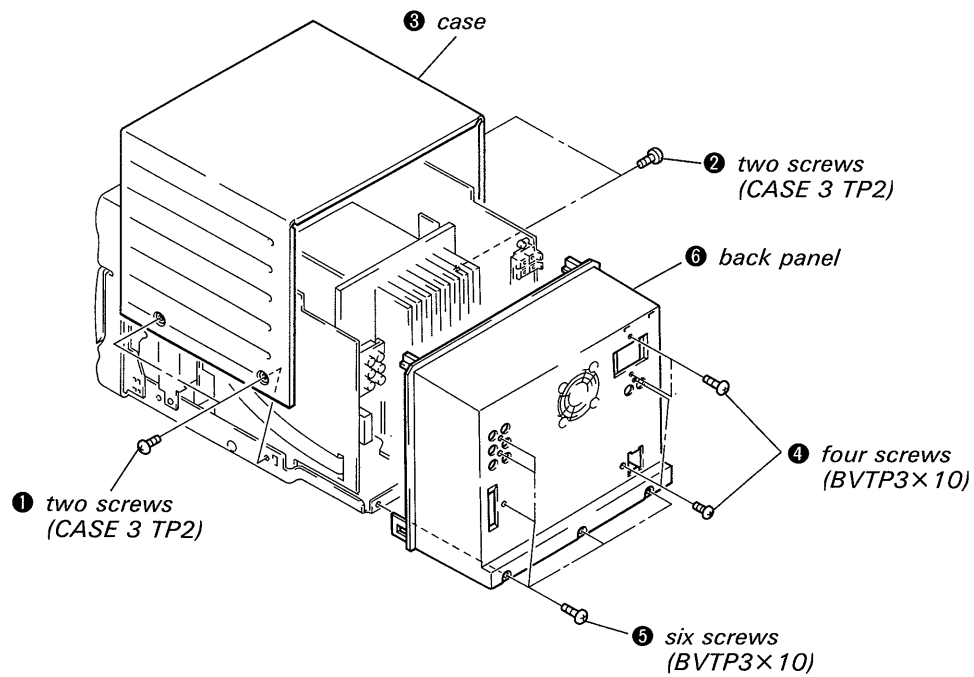
## SECTION 2 DISASSEMBLY

**NOTE:** Follow the disassembly procedure in the numerical order given.

### 2-1. CASSETTE HOLDER, AZIMUTH LID

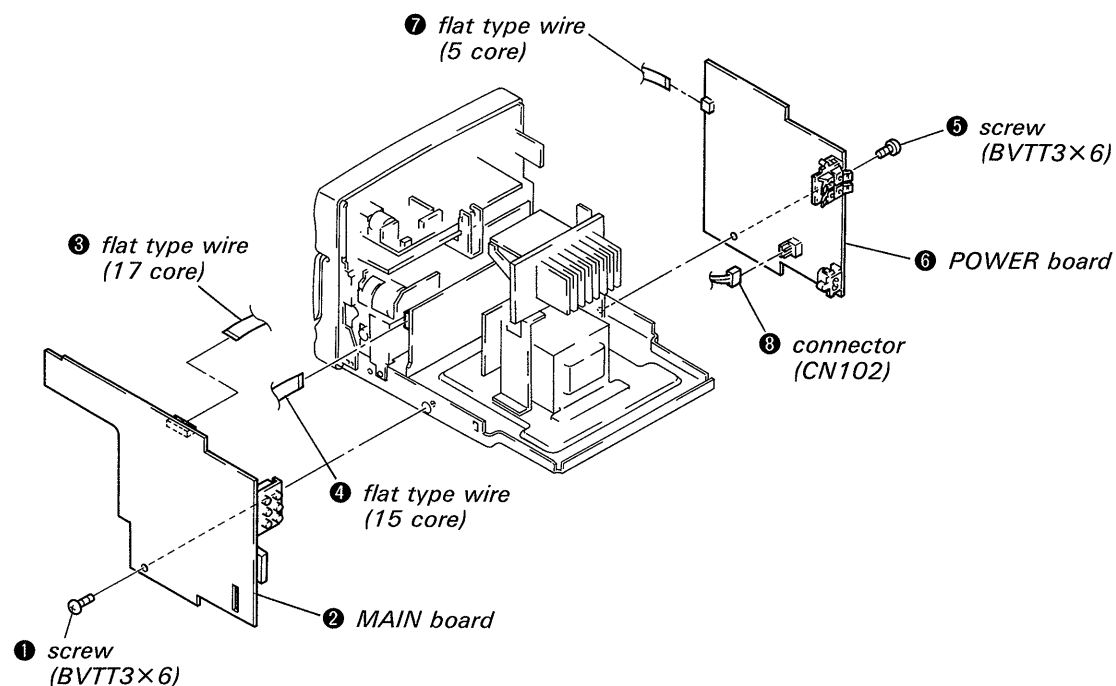


### 2-2. CASE, BACK PANEL

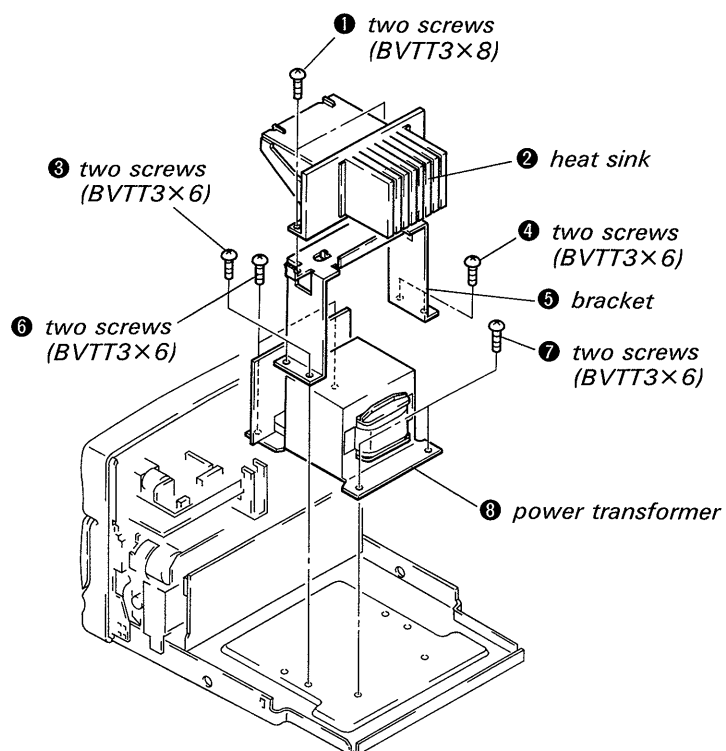




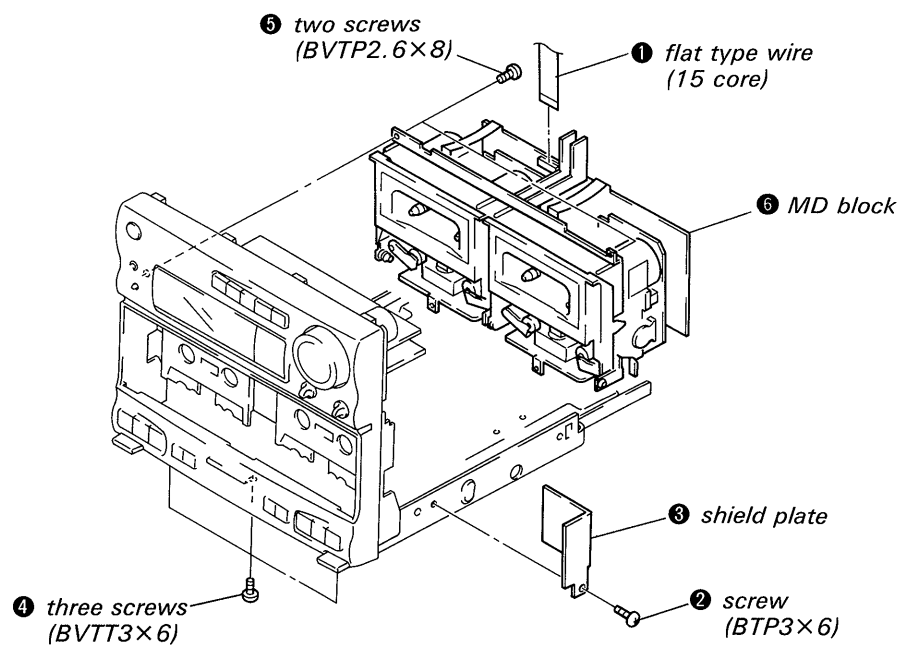
## 2-3. MAIN/POWER BOARDS



## 2-4. POWER TRANSFORMER



## 2-5. MD BLOCK



## SECTION 3 MECHANICAL ADJUSTMENTS

### PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab :
 

record/playback head	pinch roller
erase head	rubber belt
capstan	idler
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustment.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustment should be performed with the rated power supply voltage unless otherwise noted.

### • Torque Measurement

Torque	Torque meter	Meter reading
Forward	CQ-102C	35 to 60g • cm (0.49 to 0.83oz • inch)
Forward back tension	CQ-102C	2 to 6g • cm (0.028 to 0.08oz • inch)
Reverse	CQ-102RC	35 to 60g • cm (0.49 to 0.83oz • inch)
Reverse back tension	CQ-102RB	2 to 6g • cm (0.028 to 0.08oz • inch)
FF/REW	CQ-201B	70 to 110g • cm (0.98 to 1.52oz • inch)

## SECTION 4 ELECTRICAL ADJUSTMENTS

### DECK SECTION

1. The adjustment should be performed in the publication.  
(Be sure to make playback adjustment at first.)
2. The adjustment and measurement should be performed for both L-CH and R-CH.
  - Switch position  
DOLBY NR switch : OFF
3. Short the connector TP401 (test mode), before electrical adjustments.

### • Test Tape

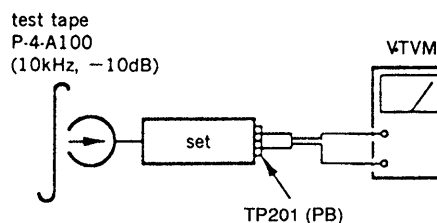
Tape	Contents	Use
P-4-A100	10kHz, -10dB	Head Azimuth Adjustment
P-4-L300	315Hz, 0dB	Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

### Record/Playback Head Azimuth Adjustment

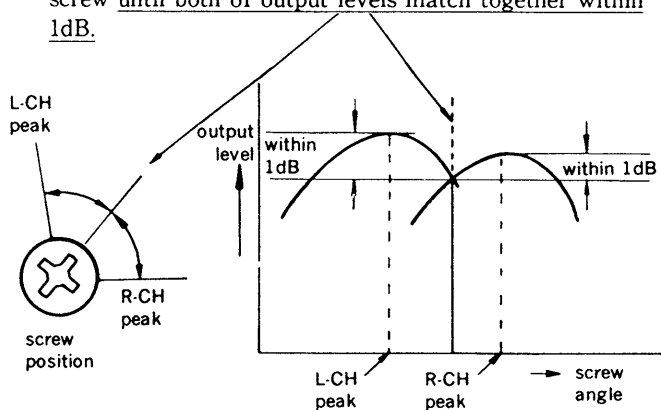
#### DECK A DECK B

#### Procedure :

1. Forward Playback Mode  
Reverse Playback Mode

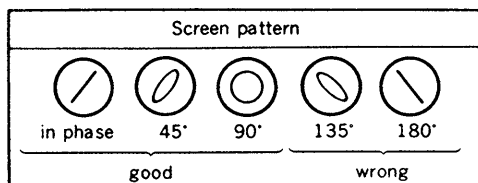
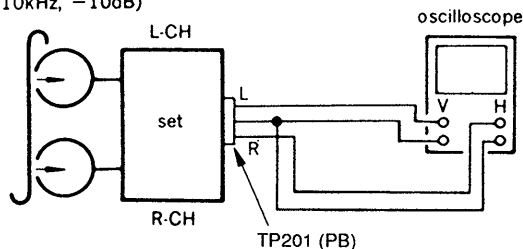


- Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.



### 3. Playback Mode

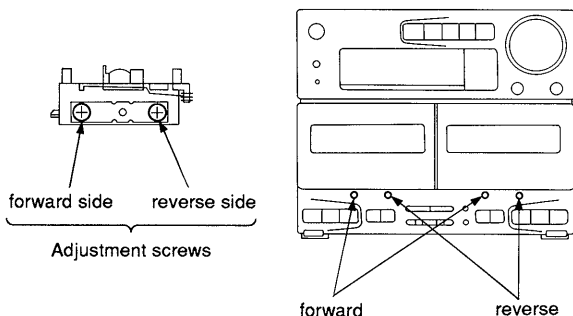
test tape  
P-4-A100  
(10kHz, -10dB)



- Change the review playback mode and repeat the steps 1 to 3.
- After the adjustment, lock the adjustment screw with suitable locking compound.

### Adjustment Location :

—record/playback head (deck A and B)



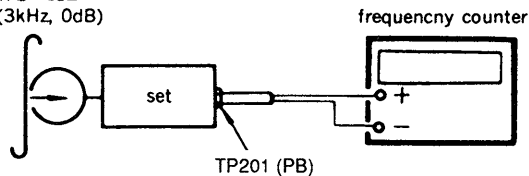
### Tape Speed Adjustment DECK A DECK B

#### Procedure :

- Perform high speed adjustment before normal speed adjustment.

Mode : playback

test tape  
WS-48B  
(3kHz, 0dB)



Speed	Deck	Adjustment	Frequency counter
※ High	A	RV72	5,970 to 6,030Hz
	B	RV72	
Normal	A	RV71	2,985 to 3,015Hz
	B	RV71	

※ Continue to press HIGH SPEED DUBBING switch (S357) in playback mode : High speed playback.

Frequency difference between the beginning and the end of the tape should be within  $\pm 3\%$ .

Frequency difference between deck A and deck B the beginning of the tape should be within 1.5%.

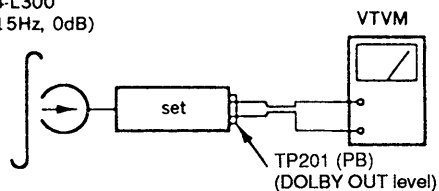
**Adjustment Location:** MD (AX) and MD (BX) boards.

### Playback Level Adjustment DECK A DECK B

#### Procedure :

Mode : playback

test tape  
P-4-L300  
(315Hz, 0dB)



Deck A is RV11 (L-CH) and RV21 (R-CH), deck B is RV11 (L-CH) and RV21 (R-CH) so that adjustment within adjustment level as follows.

#### Adjustment Level :

LINE OUT level :  $-12.7 \pm 1.0\text{dB}$  (0.16 to 0.20)

Level Difference between Channels : within 0.5dB

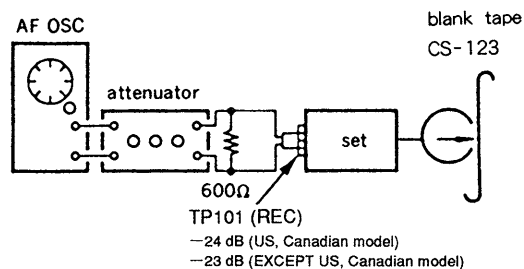
Confirm the DOLBY OUT level does not change in playback mode while changing the mode from playback to stop several times.

**Adjustment Location :** MD (AX) and MD (BX) boards

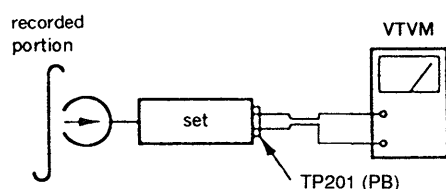
## Record Bias Adjustment **DECK B**

### Procedure :

1. record mode



2. playback mode



Confirm playback the signal recorded in step 1 become adjustment level as follows.

If these levels do not adjustment level, adjustment the RV12 (L-CH) and RV22 (R-CH) to repeat step 1 and 2.

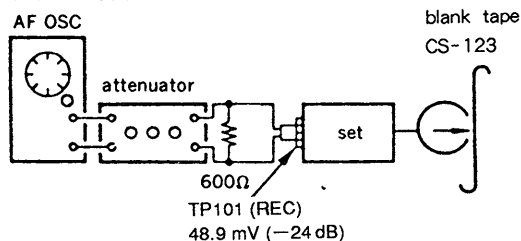
**Adjustment level :** Playback output of 315Hz to playback output of 10kHz :  $0\text{dB} \pm 0.5\text{dB}$ .

**Adjustment Location :** MD (BX) board

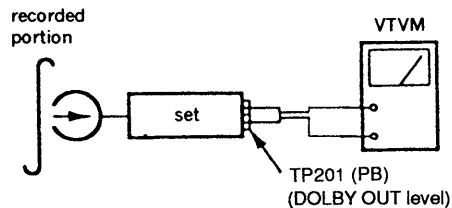
## Record Level Adjustment **DECK B**

### Procedure :

1. record mode



2. playback mode



Confirm playback the signal recorded in step become adjustment level as follows.

If these levels do not adjustment level, adjustment the RV201 (L-CH) and RV301 (R-CH) to repeat step 1 and 2.

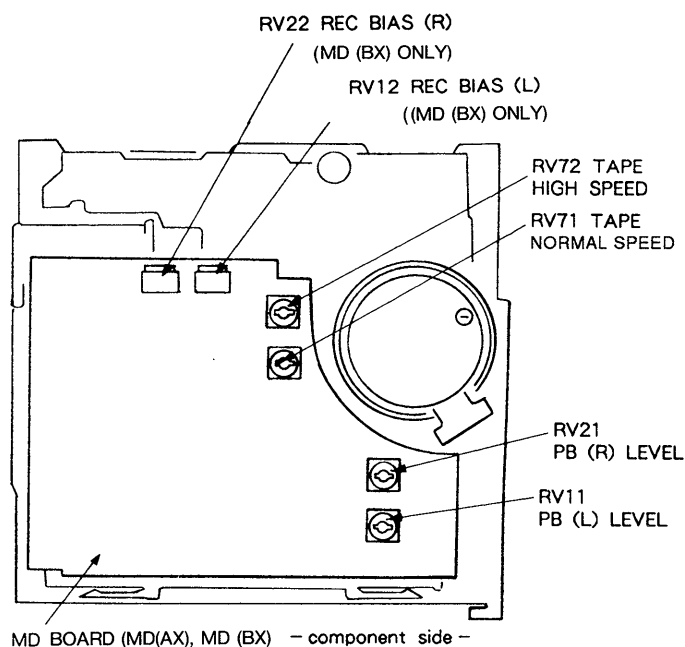
### Adjustment Level :

DOLBY OUT level :  $-24\text{dB} \pm 0.5\text{dB}$  (0.046 to 0.051V)

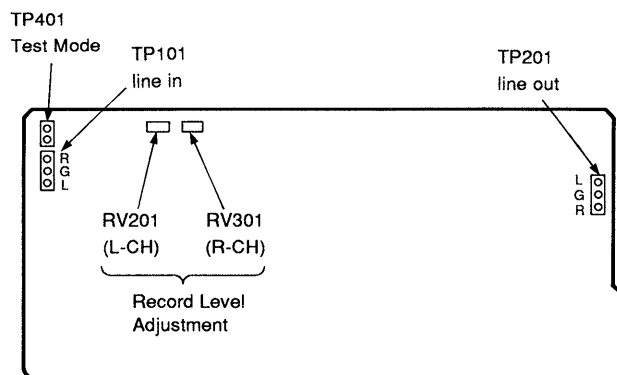
**Adjustment Location :** TC MAIN board

**Adjustment Location :**

**Mechanism deck – rear side –**



**TC MAIN board – component side –**



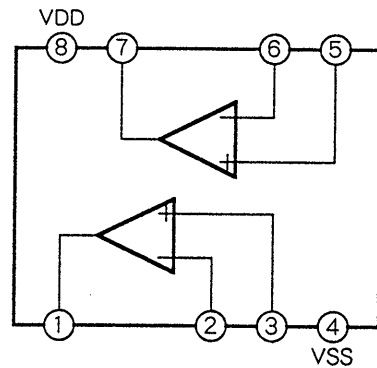
## SECTION 5 DIAGRAMS

### 5-1. IC PIN FUNCTION DESCRIPTION

#### ●IC821 TMP87CC78F

Pin. No.	Name	I/O	Description
1	VDD		+5V
2	FUNC.A	O	Function switching; VIDEO (PHONO), TAPE, MD/DAT, CD/TUNER
3	FUNC.B		
4	KARAOKE	O	ON/OFF of KARAOKE PON
5	SURR.A	O	Level switching of Surround or DSP
6	SURR.B		
7	CD-OFF	O	ON/OFF of CD
8	NC		
9			
10	C90/C70	I	Model identification L for DXA-C70 or DXA-J570C, H for DXA-C90, Presence of PHONE
11	PHONO/VIDEO	I	L for PHONO not provided, H for PHONO provided
12	KARAOKE-PON	I	Presence of KARAOKE PON
13	NC		
14	KEY0	I	Input of keyboard switch
15	KEY1	I	Input of keyboard switch
16	NC		
17	SPE-IN-L	I	Input of spectrum analyzer level 63k, 160k, 400k, 1k (Hz)
18	SPE-IN-R	I	Input of spectrum analyzer level 2.5k, 6.3k, 16k (Hz)
19	NC		
20	VOL.UP	O	UP/DOWN of volume
21	VOL.DOWN	O	UP/DOWN of volume
22	VSS		0V (GND)
23	AVSS		Analog reference GND for A/D conversion
24	AVREF		Analog ref. voltage for A/C conversion
25	VDD		+5V
26	STOP	I	At L, STOP mode becomes active to stop oscillation circuit, CPU core and peripheral circuits, thus reducing power consumption.
27	GND	I	Fixed to GND
28	POWER-ON/OFF	O	L when the system power is turned on.
29	MUTE	O	Muting of audio signal at L
30	VSS		0V (GND)
31	XI	I	High frequency oscillator connect pins
32	XO	O	
33	NRST	I	RESET signal input
34   39	LED	O	LED lighting ports
40 41	NC		
42	GEQ-CLK	O	Clock output to graphic equalizer
43	GEQ-DATA	O	Serial data output to graphic equalizer
44	NC		
45 46	SPE-A SPE-B	O	Band switching of spectrum analyzer circuit
47	NC		
48	AUBUS-OUT	O	AU bus output
49	AUBUS-IN	I	AU bus input
50	VKK		Power for fluorescent display tube driving
51 63 64 82	G13 G1 P38 P19	O	8-bit highly durable output ports for fluorescent display tube
83   98	P18   P3	I/O	8-bit highly durable I/O ports for fluorescent display tube
99 100	P2 P1	I/O	2-bit highly durable I/O ports for fluorescent display tube

## 5-2. SCHMATIC DIAGRAM —MD Section—

IC31  $\mu$ PC4570G2

## Note:

- All capacitors are in  $\mu$ F unless otherwise noted. pF:  $\mu$ F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}$ W or less unless otherwise specified.
- $\triangle$ : internal component.
- $\square$ : nonflammable resistor.
- $\square$ : fusible resistor.

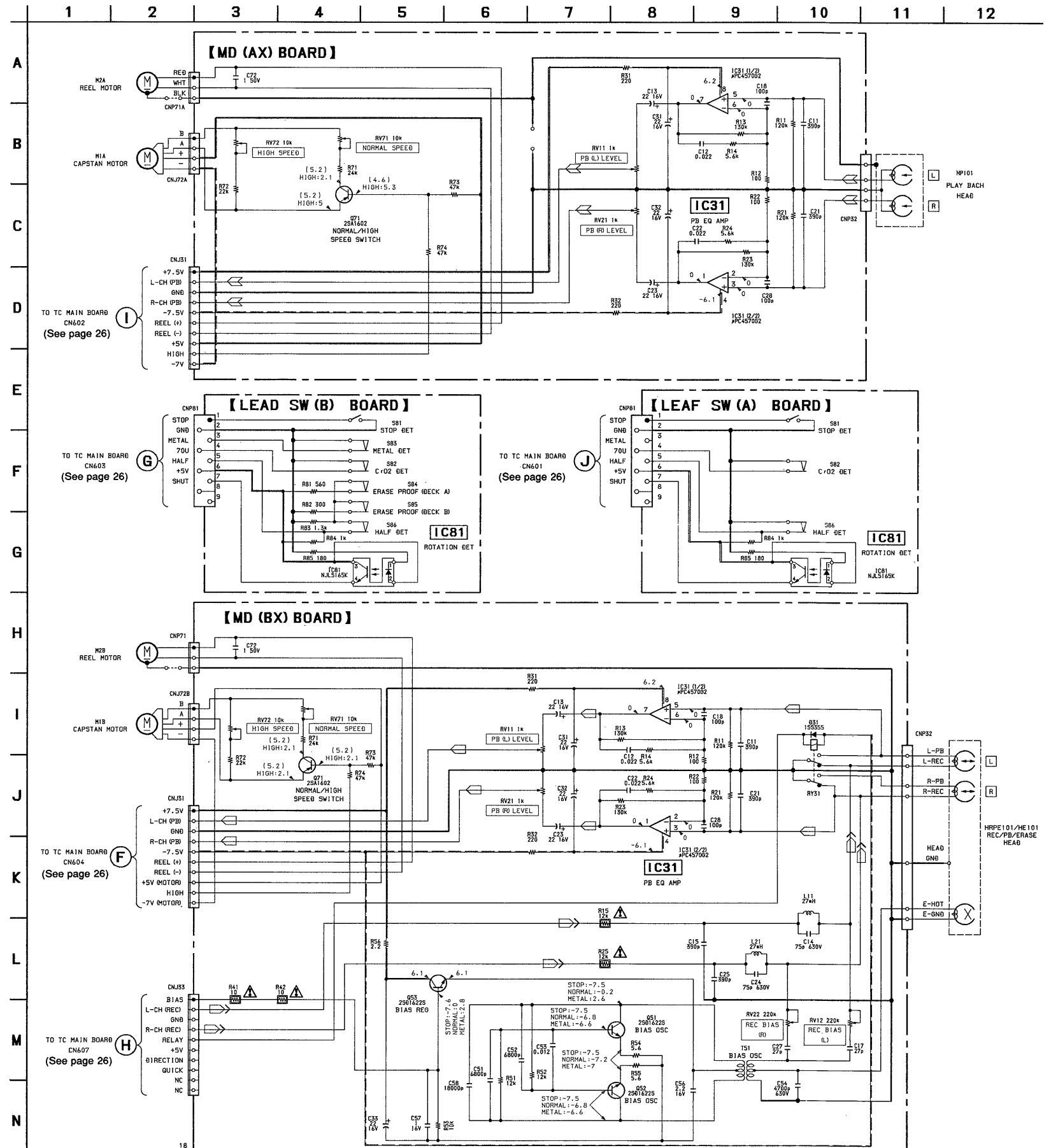
## Note:

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

## Note:

Les composants identifiés par une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

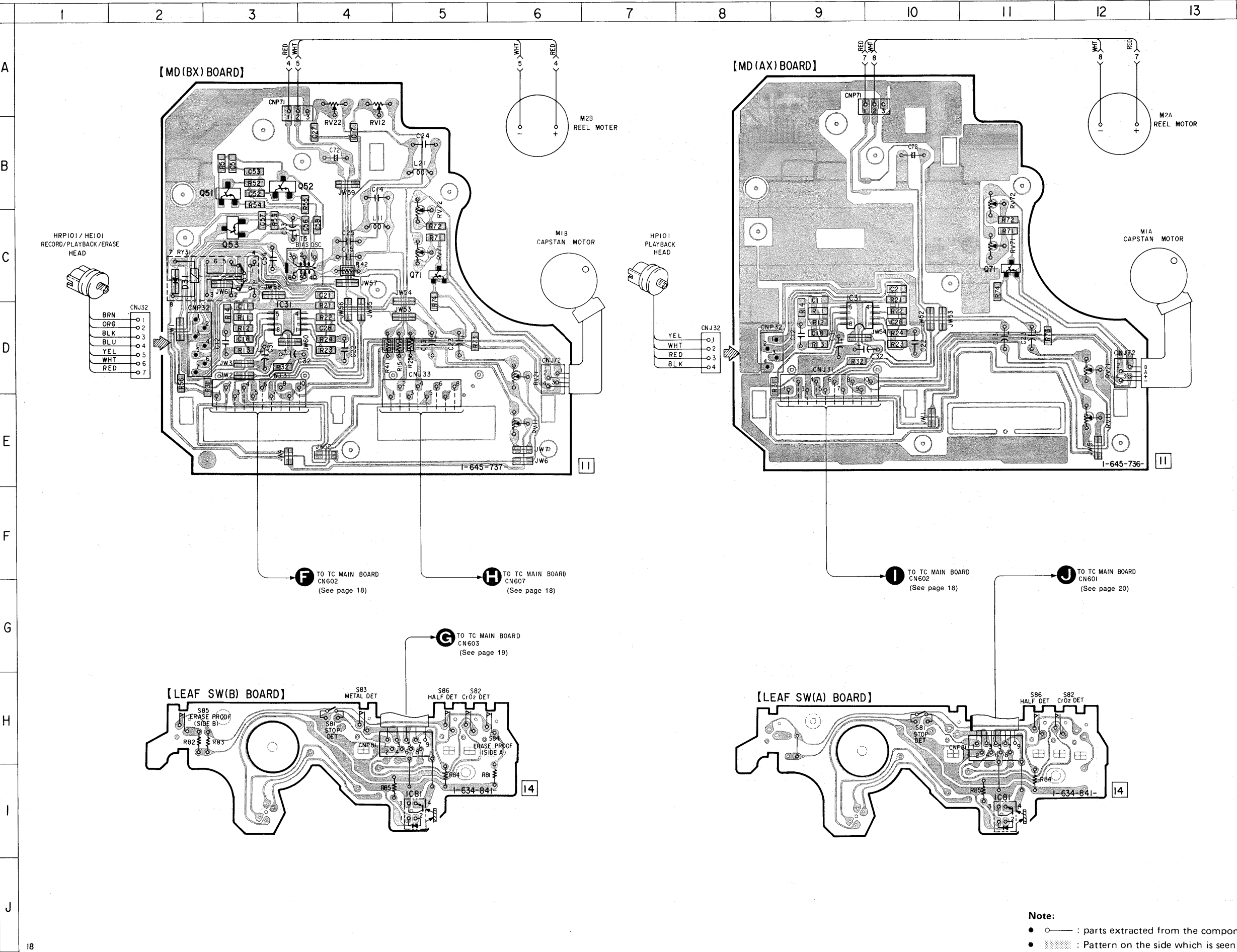
- $\square$ : B+ Line
- $\square$ : B- Line
- $\square$ : adjustment for repair.
- Voltage is dc with respect to ground under no-signal conditions.  
no mark: PLAY  
( ): REC
- Voltages are taken with a VOM (Input Impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Signal path.  
 $\square$ : PB (DECK A)  
 $\square$ : PB (DECK B)  
 $\square$ : REC (DECK B)



5-3. PRINTED WIRING BOARDS —MD Section—

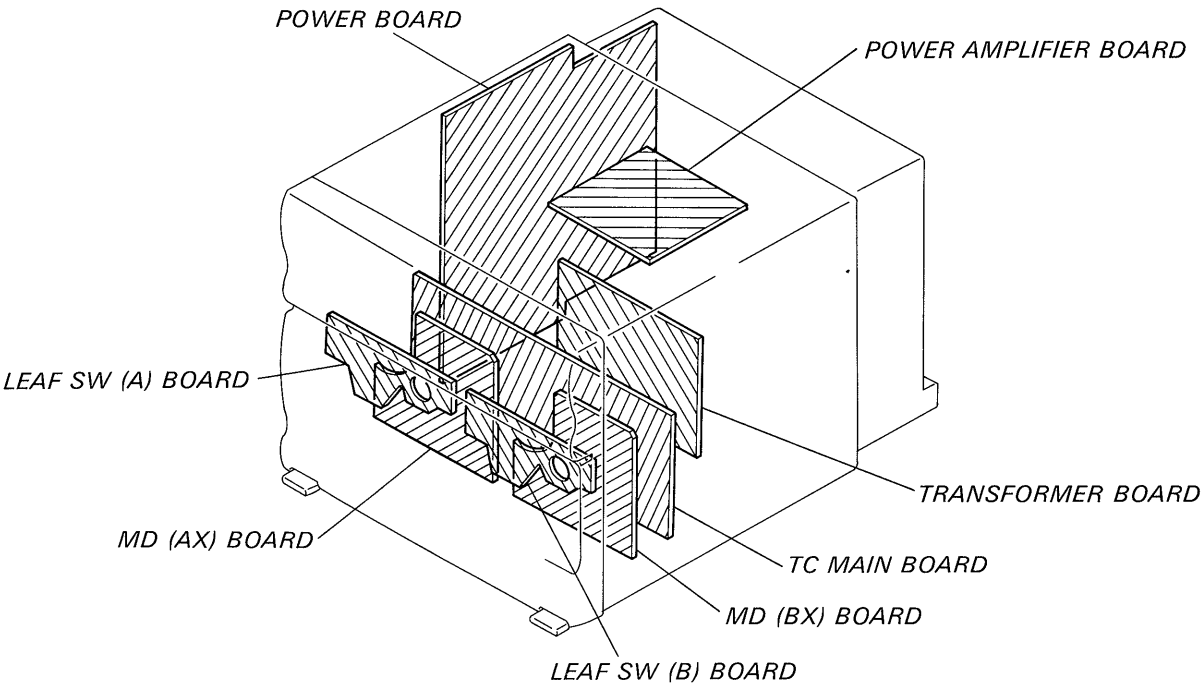
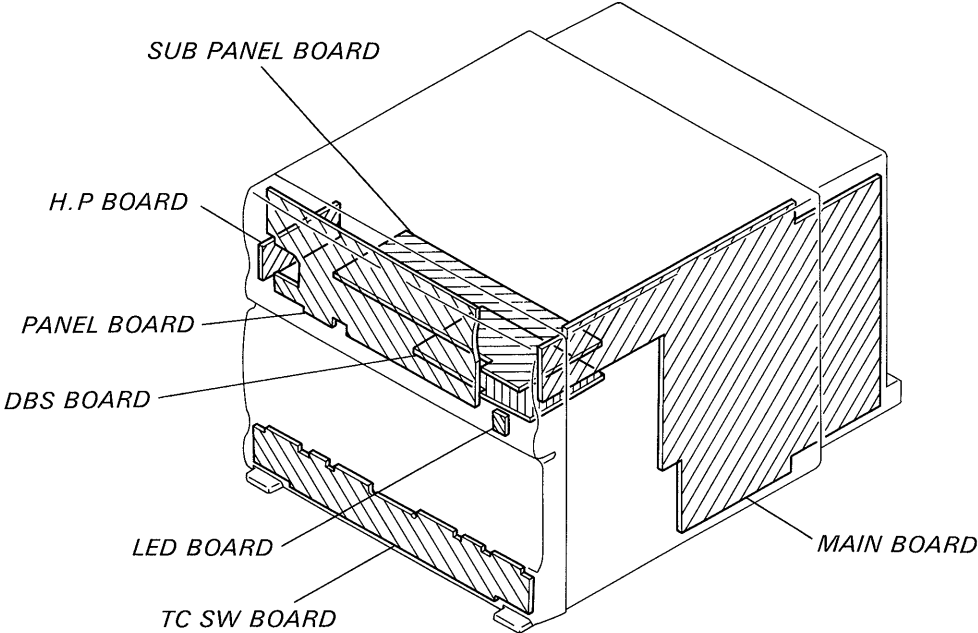
● Semiconductor Location

Ref. No.	Location
D31	C-2
IC31A	D-9
IC31B	D-3
IC81A	I-11
IC81B	I-5
Q71A	C-11
Q71B	C-5

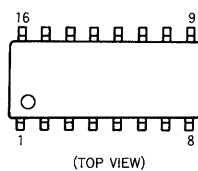




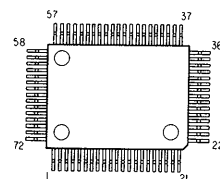
5-4. CIRCUIT BOARDS LOCATION



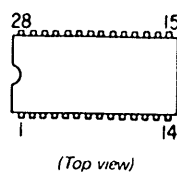
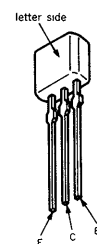
## 5-5. SEMICONDUCTOR LEAD LAYOUTS

CD4052BCM  
CD4053BCM

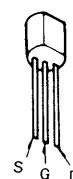
M50964-260FP



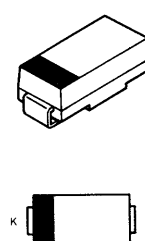
NJU7305L

2SA-1175-HFE  
2SC3623A-LK

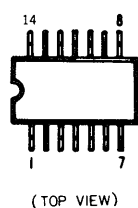
2SK246-GR3



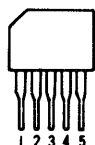
EC10DS2



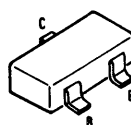
CD4066BCM



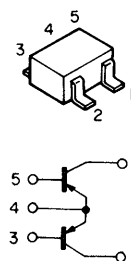
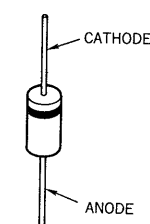
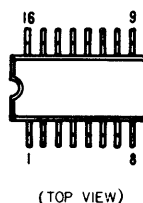
M51953BL



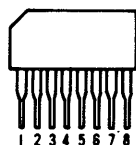
PST572E

2SA1602-F  
2SC4154-F  
DTA144EK  
RN1402  
RN2402  
RN2404TE85L

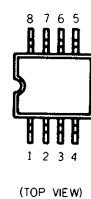
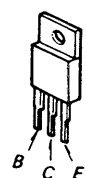
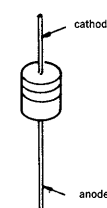
XN1114

1N4148M  
UZ-5.1BSCCXA1101M  
CXA1578M

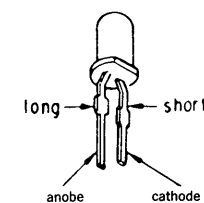
M5230L-A



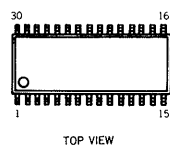
RC4558PS

2SB1094-LK  
2SD201211ES2  
2SC2603-EF

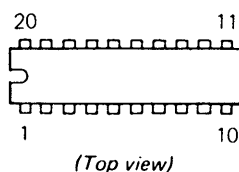
SEL2210S-CD



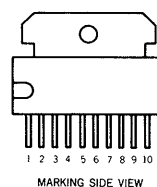
CXA1331M



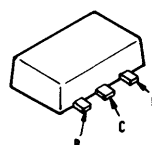
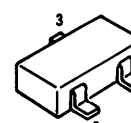
M5289P



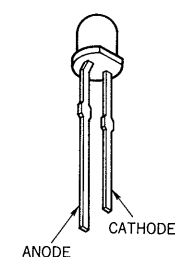
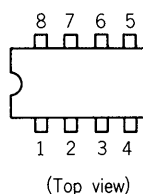
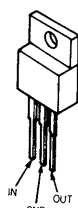
TA7272P



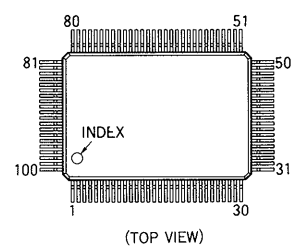
2SB1122-S

1SS184  
UZM5.6X  
UZM8.2Z

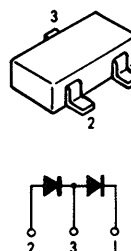
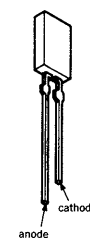
SEL2810A

LB1638  
M5218APM5F78M07L  
M5F79M07L  
TA7805S

TMP87CC78F-6104

2SC2603-EF  
DTA114ES  
DTC114ES

1SS226

SEL4225C-C  
SEL4525C-C  
SEL4925A-D

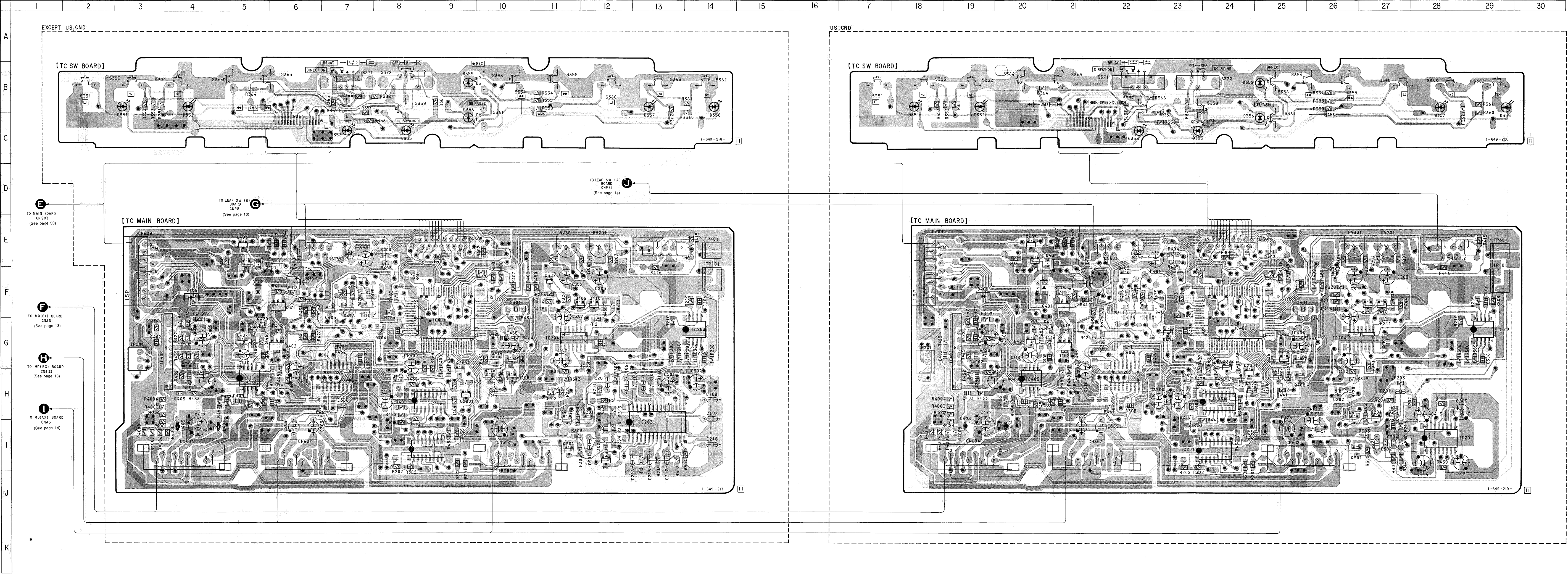


5-6. PRINTED WIRING BOARDS —TC Section—   • See page 15—17 for Circuit Boards Location and Semiconductor Lead Layouts.

• Semiconductor Location		
Ref. No.	Location	
D351	B-3	
D352	B-4	
D353	C-7	
D355	C-8	
D356	C-9	
D357	C-13	
D358	C-14	
D359	B-9	
EXCEPT US, CND		
D404	G-8	G-23
D405	—	H-24
D407	G-5	G-20
D408	F-5	F-20
D409	F-4	F-19
D416	H-10	H-25
US, CND		
IC201	I-8	I-23
IC202	H-13	H-28
IC203	F-14	F-29
IC204	G-11	G-26
IC205	H-7	H-22
IC401	F-9	F-24
IC402	G-3	G-18
IC403	H-5	H-20
IC405	H-10	H-25
IC406	H-8	H-23
EXCEPT US, CND		
Q201	I-12	I-27
Q202	H-11	H-26
Q301	I-11	I-26
Q302	F-11	F-26
Q401	F-6	F-21
Q402	G-6	G-21
Q403	E-5	E-20
Q404	F-5	F-20
Q405	F-7	F-22
Q408	H-10	H-25
Q409	F-12	F-27
Q410	F-12	F-27
Q411	F-5	F-20
Q412	I-11	I-26
Q414	G-10	G-25
Q415	G-10	G-25
Q416	F-7	F-22
Q417	F-7	F-22
Q420	G-5	G-20
Q501	I-12	I-27
Q2001	H-9	H-24
Q2002	G-9	G-24

Note:

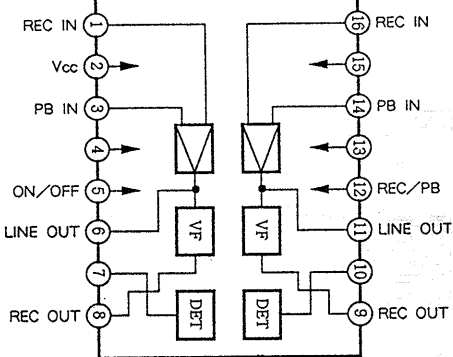
- : parts extracted from the component side.
- : Through hole.
- ▨ : Pattern on the side which is seen.
- ▩ : Pattern of the rear side.



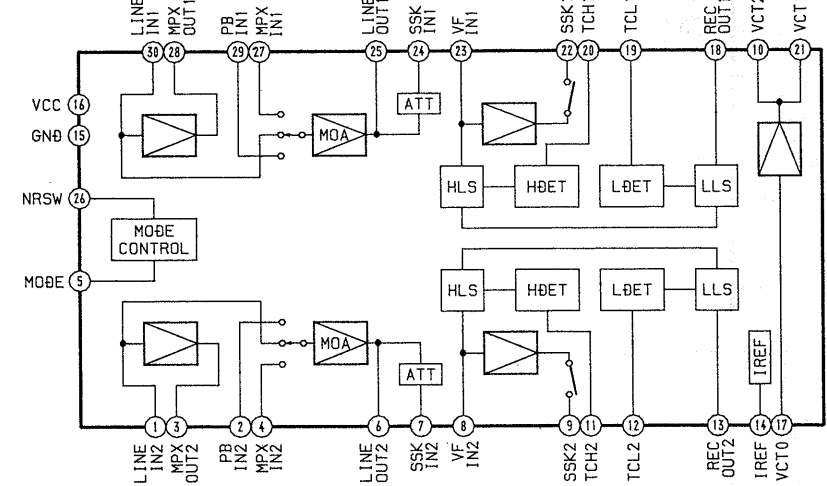


5-7. SCHEMATIC DIAGRAM —TC Section—

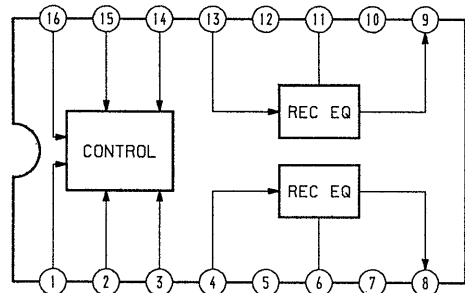
IC202 CXA1101M (US, Canadian)



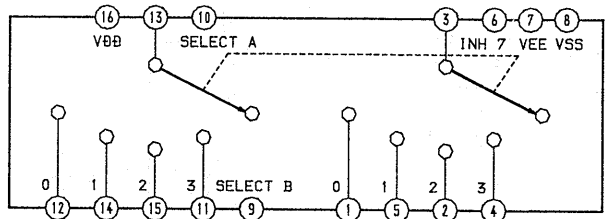
IC202 CXA1331M (EXCEPT US, Canadian)



IC205 CXA1578M



IC406 CD4052BCM



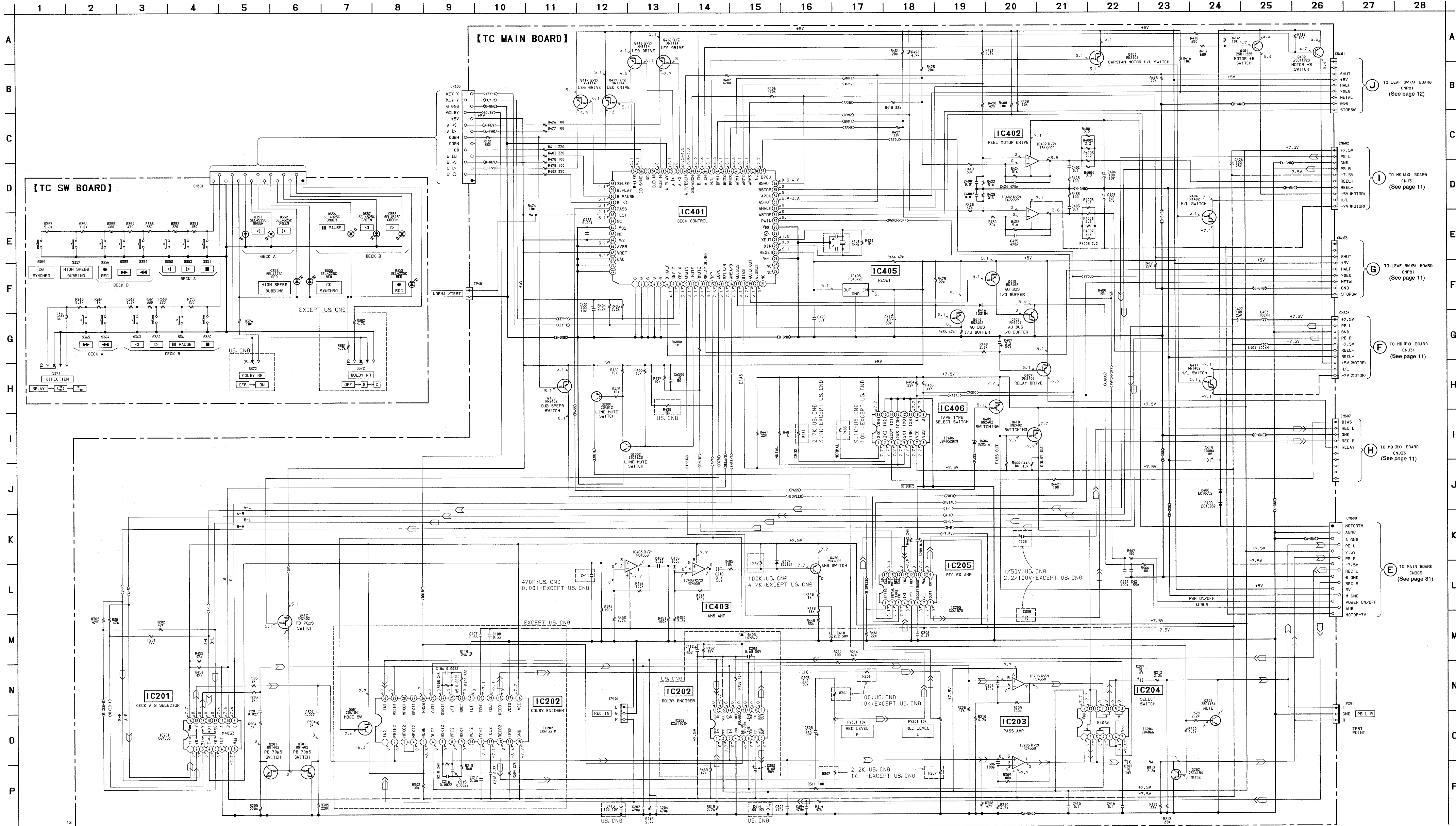
**Note:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}\text{W}$  or less unless otherwise specified.

**Note:**  
The components identified by mark **A** or dotted line with mark **A** are critical for safety. Replace only with part number specified.

**Note:**  
Les composants identifiés par une marque **A** ou une ligne pointillée avec la marque **A** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

• — : B+ Line  
• — : B- Line  
• — : adjustment for repair.  
• Voltage is dc with respect to ground under no-signal conditions.  
• Voltages are taken with a VOM (Input Impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.  
• Signal path.  
• — : PB (DECK A)  
• — : PB (DECK B)  
• — : REC (DECK B)



**5-8. PRINTED WIRING BOARDS —MAIN Section—** ● See page 15–17 for Circuit Boards Location and Semiconductor Lead Layouts.

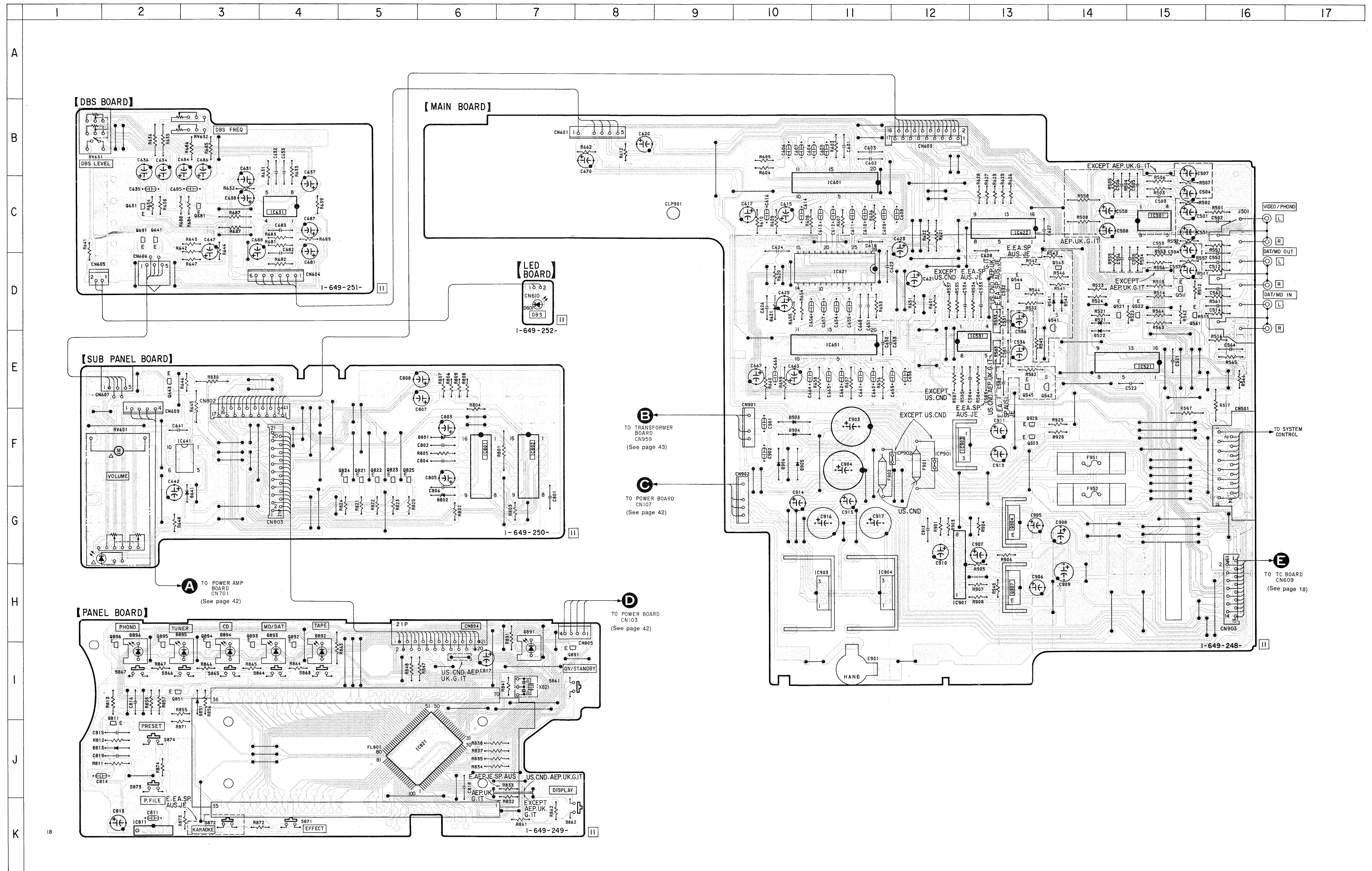
- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D521	D-14	IC821	J-6
D522	E-14	IC901	H-12
D541	D-14	IC902	F-12
D542	D-14	IC903	H-11
D601	D-7	IC904	H-11
D621	D-10		
D641	G-3	Q511	D-15
D601	F-6	Q521	D-14
D802	G-6	Q522	D-15
D812	J-3	Q541	E-14
D851	I-3	Q542	E-14
D891	I-7	Q543	D-14
D892	I-4	Q544	D-13
D893	I-4	Q545	E-13
D894	I-3	Q561	D-15
D895	I-3	Q631	C-2
D896	I-2	Q641	D-2
D903	F-10	Q643	E-2
D904	F-10	Q681	C-3
D905	F-10	Q691	D-2
D906	F-10	Q811	J-2
		Q821	F-5
IC501	C-15	Q822	F-5
IC521	E-15	Q823	F-5
IC531	E-13	Q824	F-5
IC601	C-11	Q825	F-5
IC621	D-11	Q851	I-2
IC622	C-13	Q891	I-8
IC631	C-4	Q892	I-4
IC641	F-3	Q893	I-3
IC651	E-11	Q894	I-3
IC801	F-7	Q895	I-2
IC802	F-7	Q896	I-2
IC811	K-2		

**Note:**

- ○ — : parts extracted from the component side.
- ■ ■ ■ ■ ■ : Pattern on the side which is seen.

- CND : Canadian model
- G : German model
- IT : Italian model
- AUS : Australian model
- EA : Saudi Arabia model
- JE : Tourist model





- Note:**
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
  - All resistors are in  $\Omega$  and  $1/2\text{W}$  or less unless otherwise specified.
  - : nonflammable resistor.
  - : fusible resistor.

**Note:**  
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

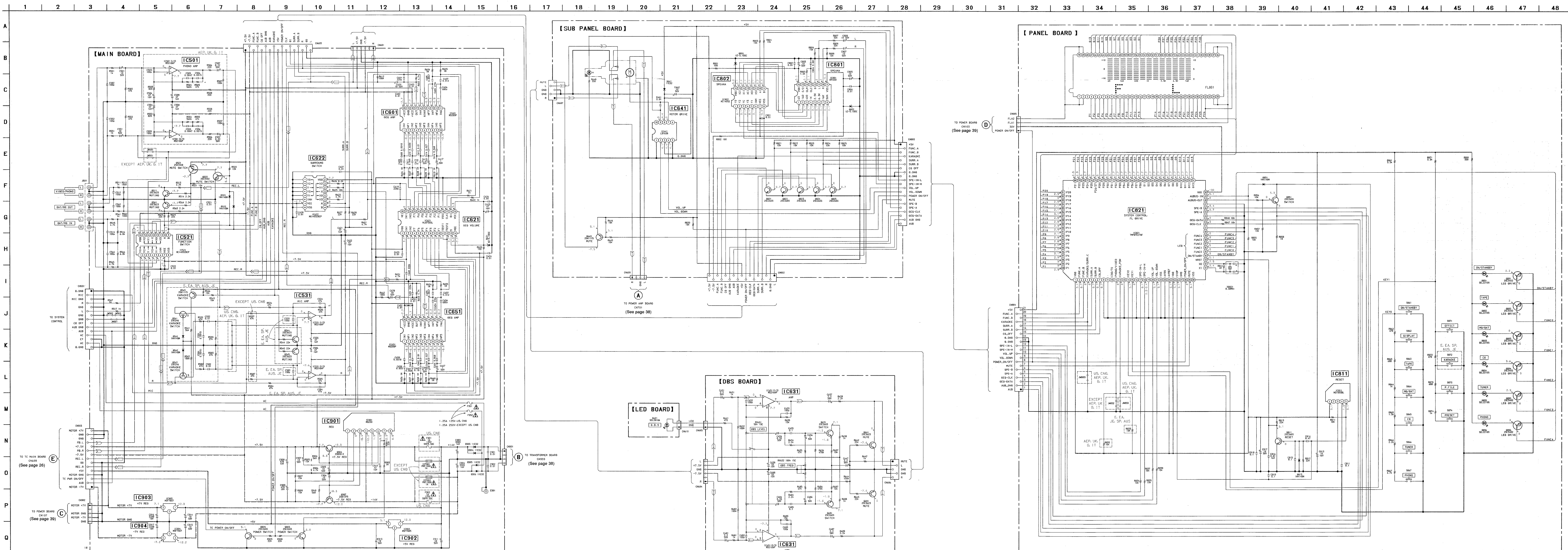
**Note:**  
Les composants identifiés par une marque ou une ligne pointillée avec une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- : B+ Line
- : B- Line
- : adjustment for repair.
- Voltage is dc with respect to ground under no-signal conditions.
- no mark: PLAY
- ( ): REC
- Voltages are taken with a VOM (input Impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Signal path:
  - : PB (DECK A)
  - : PB (DECK B)
  - : REC (DECK B)

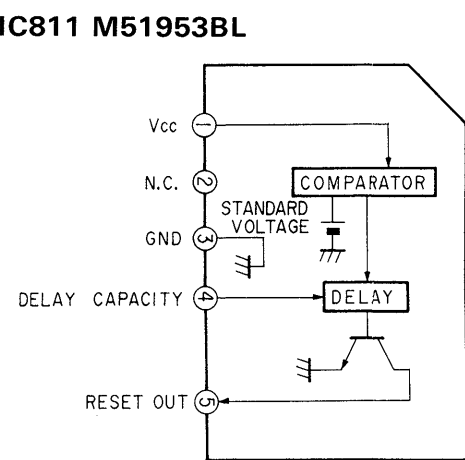
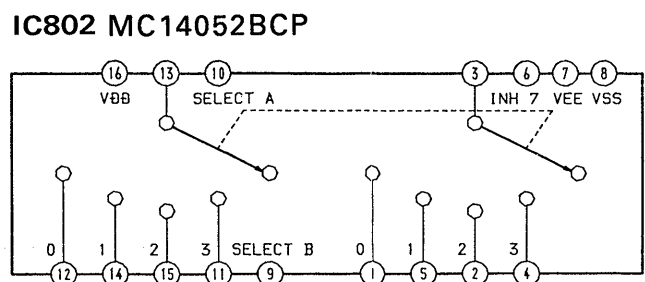
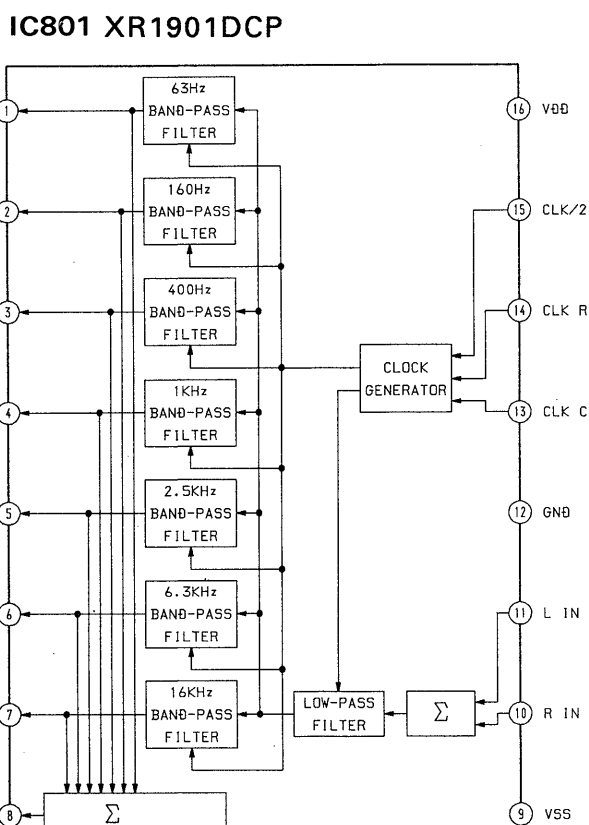
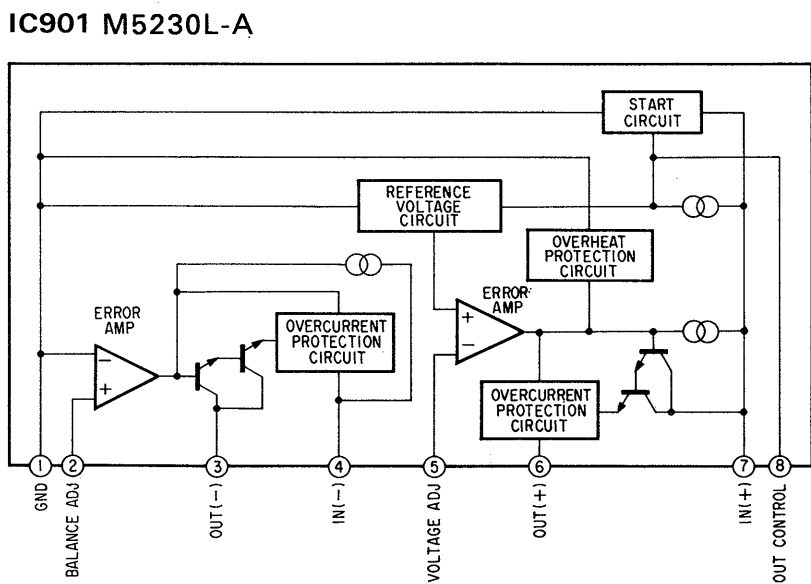
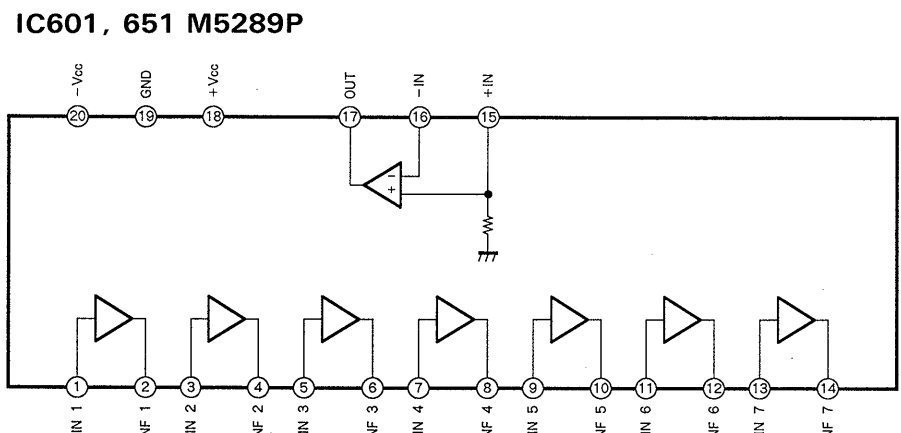
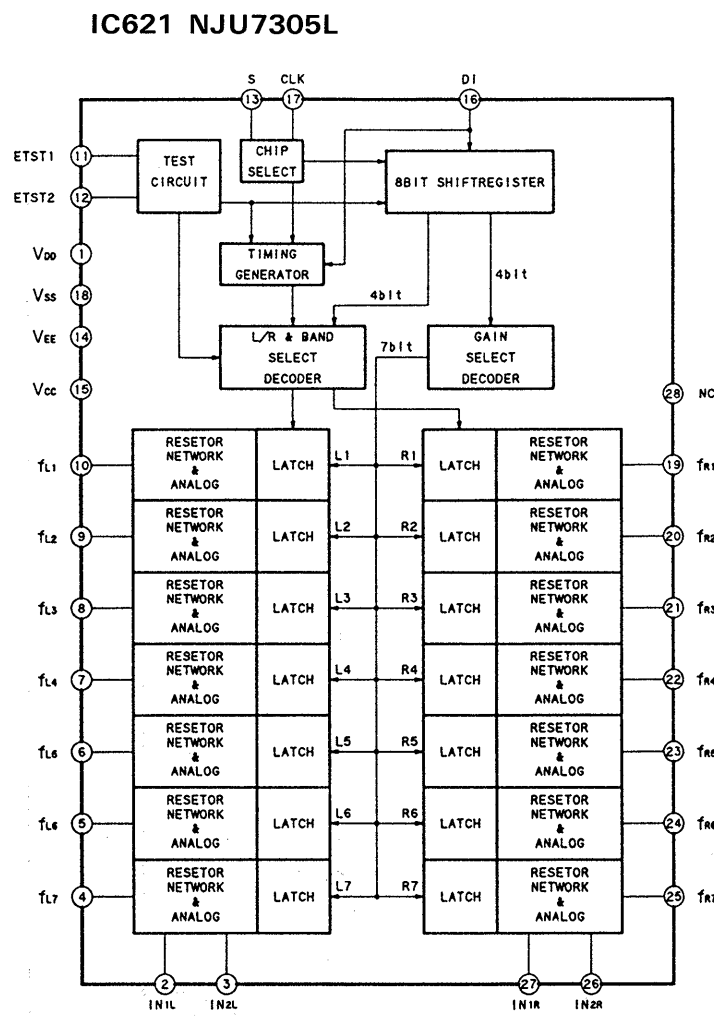
- CND : Canadian model
- G : German model
- IT : Italian model
- AUS : Australian model
- EA : Saudi Arabia model
- JE : Tourist model

# 5-9. SCHEMATIC DIAGRAM —MAIN Section—

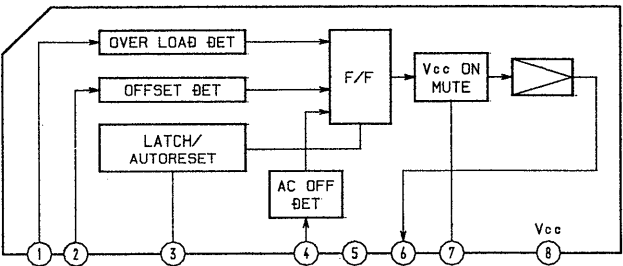
• See page 36 for IC Block Diagrams.



IC Block Diagrams (MAIN Section)



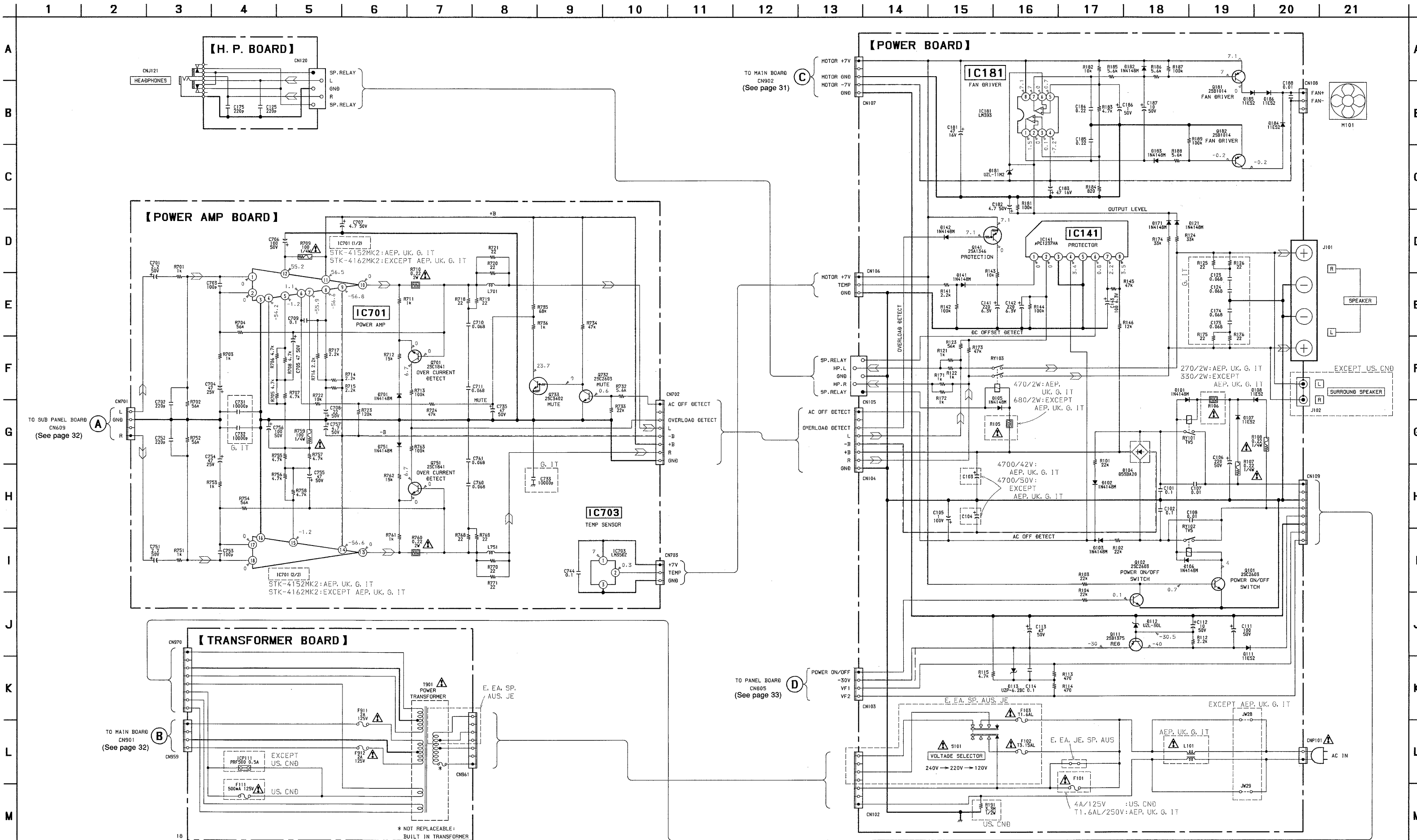
IC141  $\mu$ PC1237HA



- Note:**
- All capacitors are in  $\mu$ F unless otherwise noted. pF:  $\mu$ F
  - 50WV or less are not indicated except for electrolytics and tantalums.
  - All resistors are in  $\Omega$  and  $\frac{1}{2}$ W or less unless otherwise specified.
  - $\triangle$ : internal component.
  - $\square$ : nonflammable resistor.
  - $\square$ : fusible resistor.

- Note:**
- The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.
- Les composants identifiés par une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
- no mark: PLAY  
( ): REC  
• Voltages are taken with a VOM (input impedance 10M  $\Omega$ ). Voltage variations may be noted due to normal production tolerances.  
• Signal path:  
 $\Sigma$ : PB (DECK A)  
 $\square$ : PB (DECK B)

5-10. SCHEMATIC DIAGRAM —POWER Section—

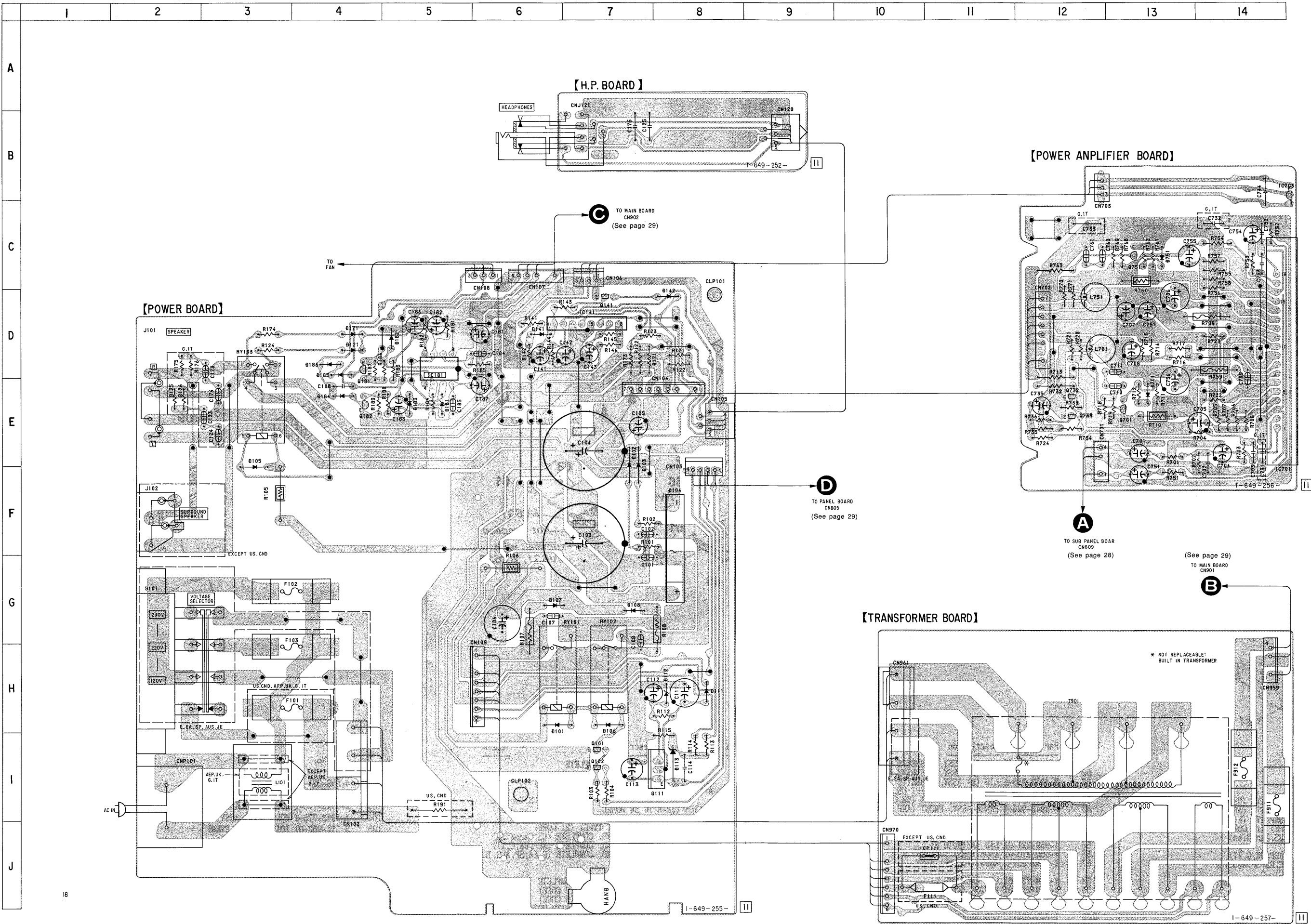


5-11. PRINTED WIRING BOARDS  
—POWER Section—

● See page 15—17 for  
Circuit Boards Location and  
Semiconductor Lead Layouts.

● Semiconductor Location

Ref. No.	Location
D101	H-7
D102	F-7
D103	F-7
D104	F-8
D105	F-3
D106	H-7
D107	G-6
D108	G-7
D111	H-8
D112	H-8
D113	I-8
D121	D-4
D141	D-6
D142	D-8
D171	D-4
D181	E-5
D182	D-5
D183	E-5
D184	E-4
D185	D-4
D186	D-4
D701	E-13
D751	C-13
IC141	D-7
IC181	E-5
IC701	E-13
IC703	C-13
Q101	I-7
Q102	I-7
Q111	I-8
Q141	D-7
Q181	E-4
Q182	E-4
Q701	E-13
Q732	E-12
Q733	E-12
Q751	C-13



Note:  
● — : parts extracted from the component side.  
● : Pattern on the side which is seen.



## SECTION 6 EXPLODED VIEWS

### NOTE:



- -xx,-x mean standardized parts, so they may have some differences from the original one.


- Color Indication of Appearance Parts  
Example:

KNOB, BALANCE (WHITE)...(RED)

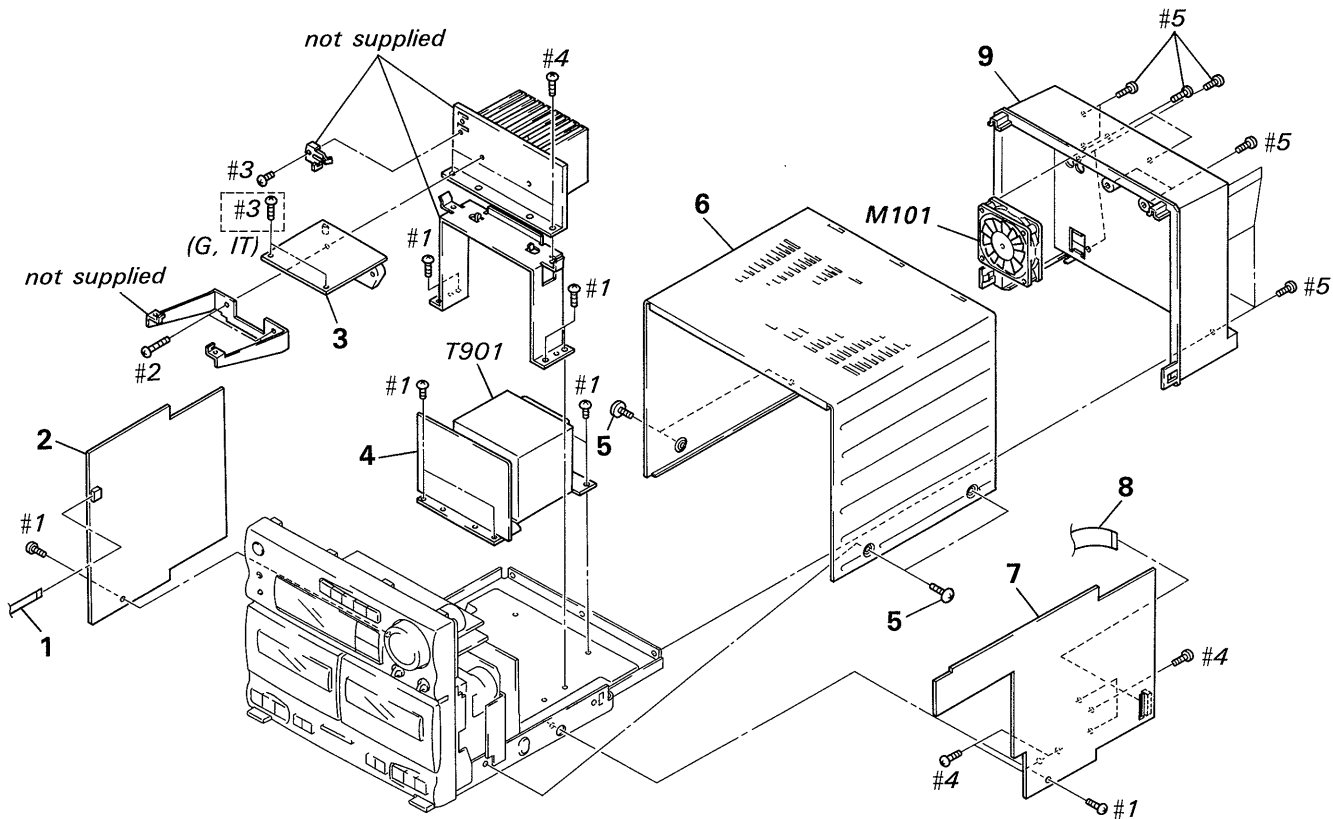
↑                      ↑  
Parts color       Cabinet's color

- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (#mark) list is given in the last of this parts list.
- Abbreviations  
JE: Tourist                      AUS: Australian  
EA: Saudi Arabia              G: German  
SP: Singapore                IT: Italian





The components identified by mark  or dotted line with mark.  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

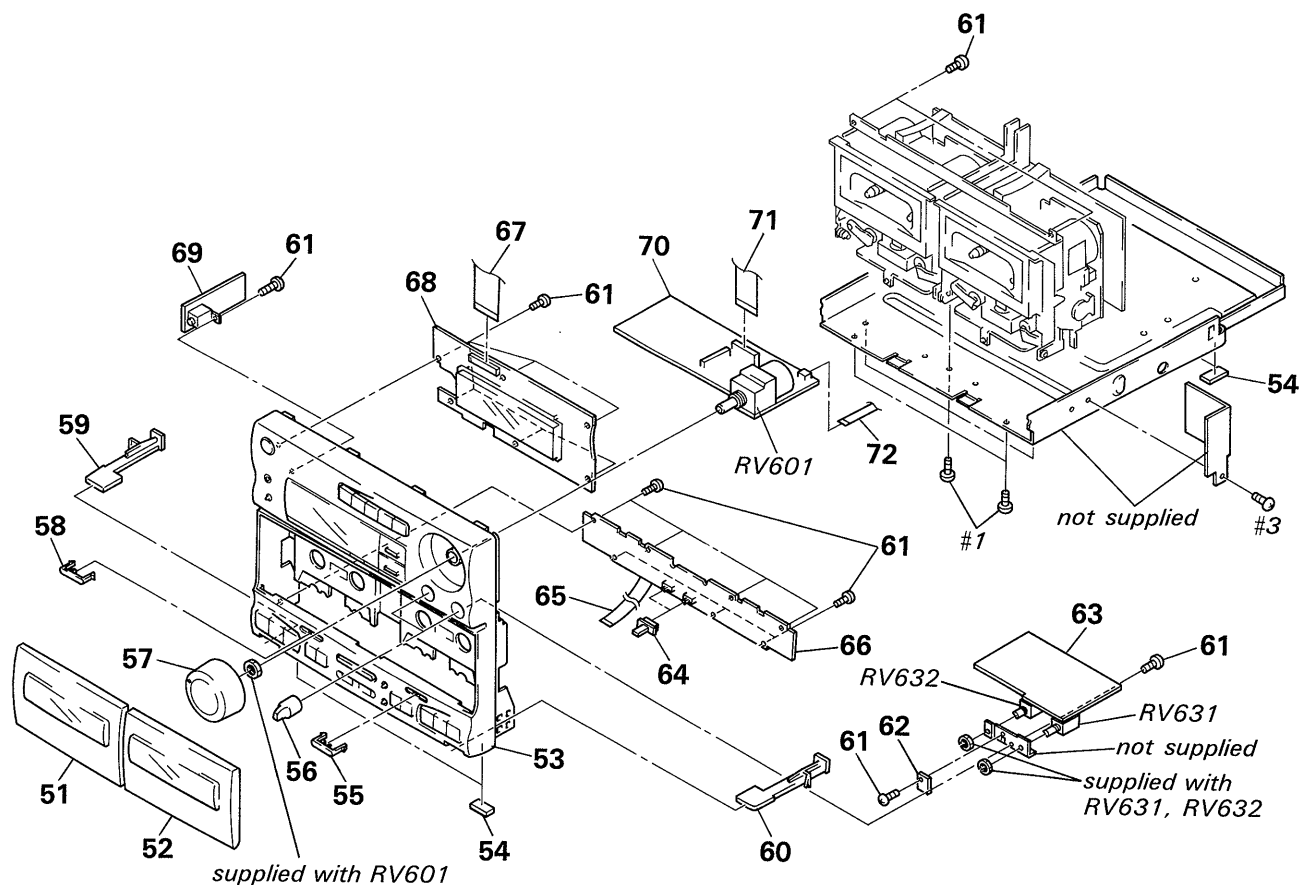
### 6-1. CASE, POWER SECTION



Ref.No.	Part No.	Description	Remark
1	1-751-686-11	WIRE (FLAT TYPE) (5 CORE)	
*2	A-4365-234-A	POWER BOARD, COMPLETE (US, Canadian)	
*2	A-4365-239-A	POWER BOARD, COMPLETE (AEP, UK)	
*2	A-4365-249-A	POWER BOARD, COMPLETE (E, JE)	
*2	A-4365-251-A	POWER BOARD, COMPLETE (EA, SP, AUS)	
*2	A-4365-252-A	POWER BOARD, COMPLETE (G, IT)	
*3	A-4365-235-A	POWER AMPLIFIER BOARD, COMPLETE (EXCEPT AEP, UK, G, IT)	
*3	A-4365-240-A	POWER AMPLIFIER BOARD, COMPLETE (AEP, UK)	
*3	A-4365-253-A	POWER AMPLIFIER BOARD, COMPLETE (G, IT)	
*4	1-649-257-11	TRANSFORMER BOARD	
5	3-363-099-01	SCREW (CASE 3 TP2)	
*6	4-960-313-41	CASE	

Ref.No.	Part No.	Description	Remark
*7	A-4365-224-A	MAIN BOARD, COMPLETE (US, Canadian)	
*7	A-4365-237-A	MAIN BOARD, COMPLETE (AEP, UK, G, IT)	
*7	A-4365-247-A	MAIN BOARD, COMPLETE (E, EA, SP, AUS, JE)	
8	1-751-689-11	WIRE (FLAT TYPE) (15 CORE)	
*9	4-960-312-01	PANEL, BACK (US, Canadian)	
*9	4-960-312-11	PANEL, BACK (AEP, UK, G, IT)	
*9	4-960-312-31	PANEL, BACK (E, EA, SP, AUS, JE)	
M101	1-698-173-11	MOTOR, FAN (DC)	
 T901	1-423-776-11	TRANSFORMER, POWER (E, EA, SP, AUS, JE)	
 T901	1-423-777-11	TRANSFORMER, POWER (UK)	
 T901	1-423-778-11	TRANSFORMER, POWER (AEP, G, IT)	
 T901	1-423-779-11	TRANSFORMER, POWER (US, Canadian)	

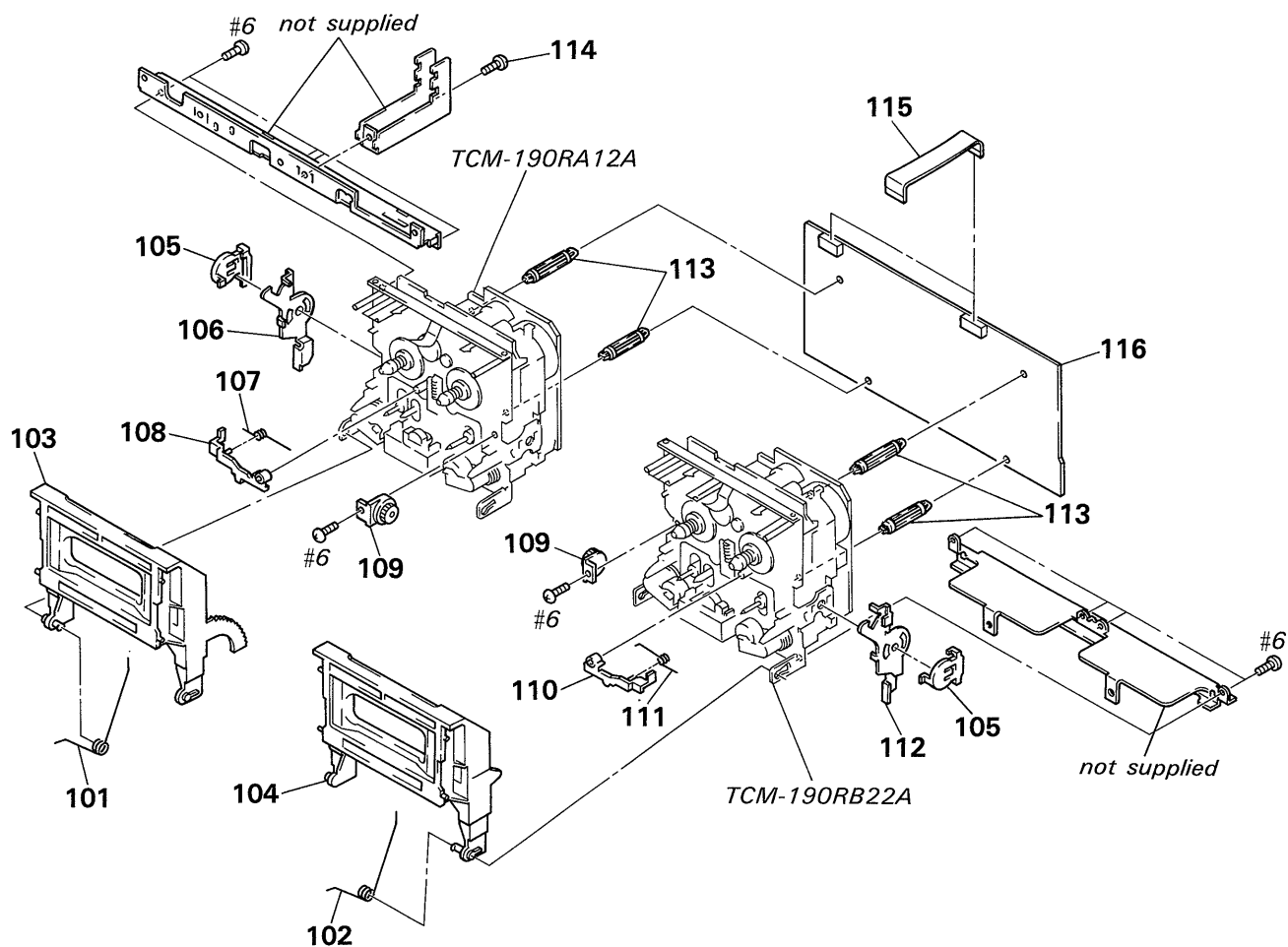
## 6-2. FRONT PANEL SECTION



Ref.No.	Part No.	Description	Remark
51	X-4943-803-1	LID (L) ASSY, CASSETTE	
52	X-4943-802-1	LID (R) ASSY, CASSETTE (US,Canadian)	
52	X-4943-958-1	LID (R) ASSY, CASSETTE (EXCEPT US,Canadian)	
53	X-4943-918-1	PANEL ASSY, FRONT (US,Canadian)	
53	X-4943-926-1	PANEL ASSY, FRONT (AEP,UK,G,IT)	
53	X-4943-966-1	PANEL ASSY, FRONT (E,EA,SP,AUS,JE)	
54	4-930-336-31	FOOT (FELT)	
55	4-959-221-01	LID (AZIMUTH R)	
56	4-960-310-01	KNOB (DBS)	
57	X-4942-957-1	KNOB (VOLUME) ASSY	
58	4-959-222-01	LID (AZIMUTH L)	
59	4-959-210-01	BUTTON (EJECT-L)	
60	4-959-288-01	BUTTON (EJECT-R)	
61	4-951-620-01	SCREW (2.6X8), +BVTP	
* 62	1-649-254-11	LED BOARD	

Ref.No.	Part No.	Description	Remark
* 63	A-4365-228-A	DBS BOARD, COMPLETE	
64	4-959-223-01	KNOB (TC)	
65	1-696-746-11	WIRE (FLAT TYPE) (15 CORE)	
* 66	A-4365-220-A	TC SW BOARD, COMPLETE (EXCEPT US,Canadian)	
* 66	A-4365-232-A	TC SW BOARD, COMPLETE (US,Canadian)	
67	1-751-690-11	WIRE (FLAT TYPE) (21 CORE)	
* 68	A-4365-225-A	PANEL BOARD, COMPLETE (US,Canadian)	
* 68	A-4365-238-A	PANEL BOARD, COMPLETE (AEP,UK,G,IT)	
* 68	A-4365-248-A	PANEL BOARD, COMPLETE (E,EA,SP,AUS,JE)	
* 69	1-649-252-11	H.P BOARD	
* 70	A-4365-226-A	SUB PANEL BOARD, COMPLETE	
71	1-590-577-11	WIRE, FLAT TYPE (17 CORE)	
72	1-751-686-11	WIRE (FLAT TYPE) (5 CORE)	
RV601	1-223-487-11	RES, VAR, CARBON (WITH MOTOR) (VOLUME)	

## 6-3. MECHANISM DECK CHASSIS SECTION

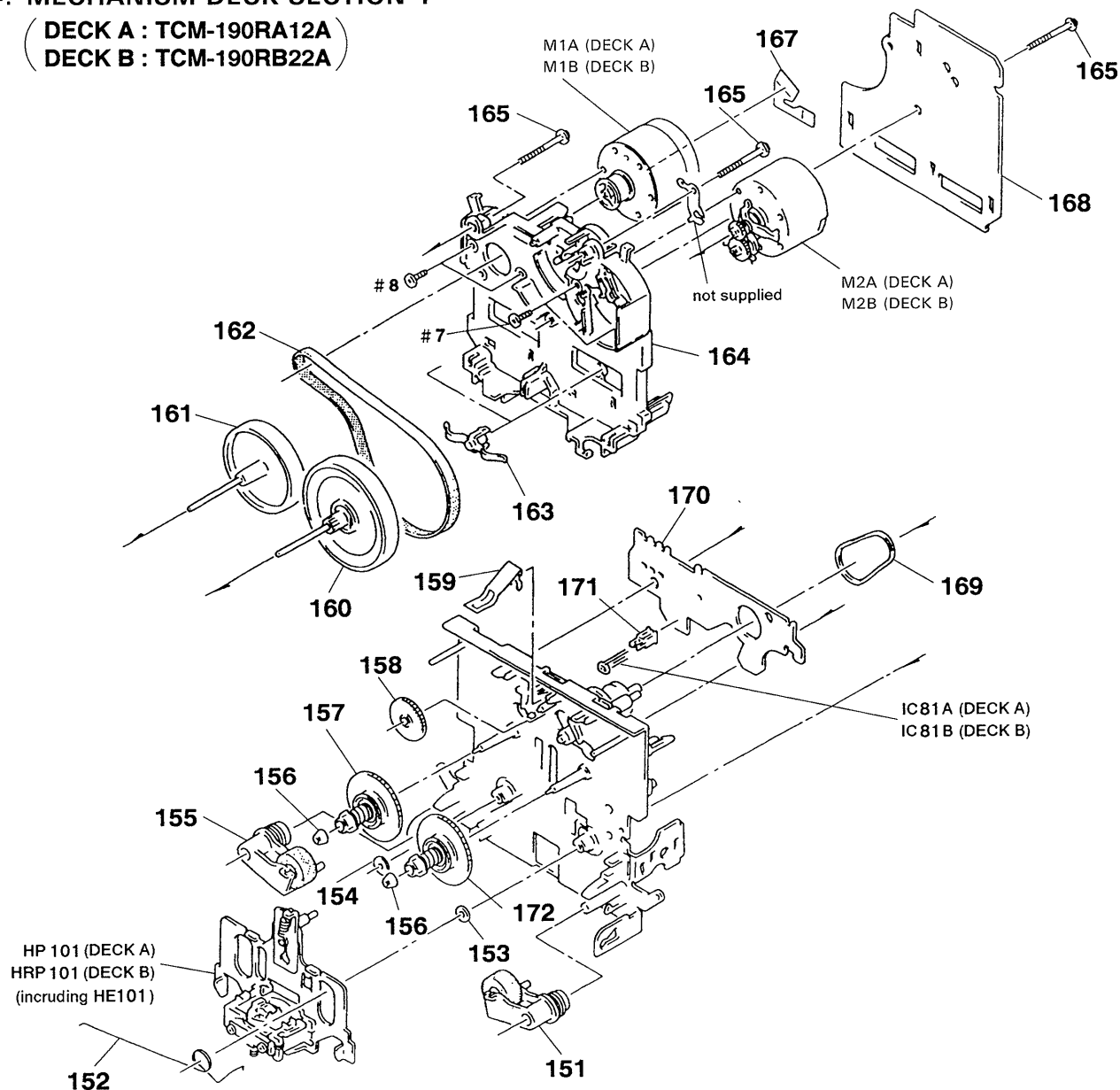


Ref.No.	Part No.	Description	Remark
101	4-959-231-01	SPRING (L), TORSION	
102	4-959-232-01	SPRING (R), TORSION	
103	X-4943-776-1	HOLDER (L) ASSY, CASSETTE	
104	X-4943-775-1	HOLDER (R) ASSY, CASSETTE	
105	3-354-957-01	JOINT (LOCK LEVER)	
*106	3-367-709-01	LEVER (LOCK LEVER L)	
107	3-354-961-01	SPRING (EJ SAFTY SPRING L)	
108	3-354-955-01	LEVER (EJ SAFTY LEVER L)	
109	3-354-963-01	DAMPER	

Ref.No.	Part No.	Description	Remark
110	3-354-956-01	LEVER (EJ SAFTY LEVER R)	
111	3-354-962-01	SPRING (EJ SAFTY SPRING R)	
*112	3-367-710-01	LEVER (LOCK LEVER R)	
*113	3-682-419-21	HOLDER, P.C.B	
114	4-951-620-01	SCREW (2.6X8), +BVTP	
115	1-590-902-11	WIRE, FLAT TYPE (9 CORE)	
*116	A-4365-221-A	TC MAIN BOARD, COMPLETE (EXCEPT US,Canadian)	
*116	A-4365-233-A	TC MAIN BOARD, COMPLETE (US,Canadian)	

## 6-4. MECHANISM DECK SECTION-1

( DECK A : TCM-190RA12A )  
( DECK B : TCM-190RB22A )

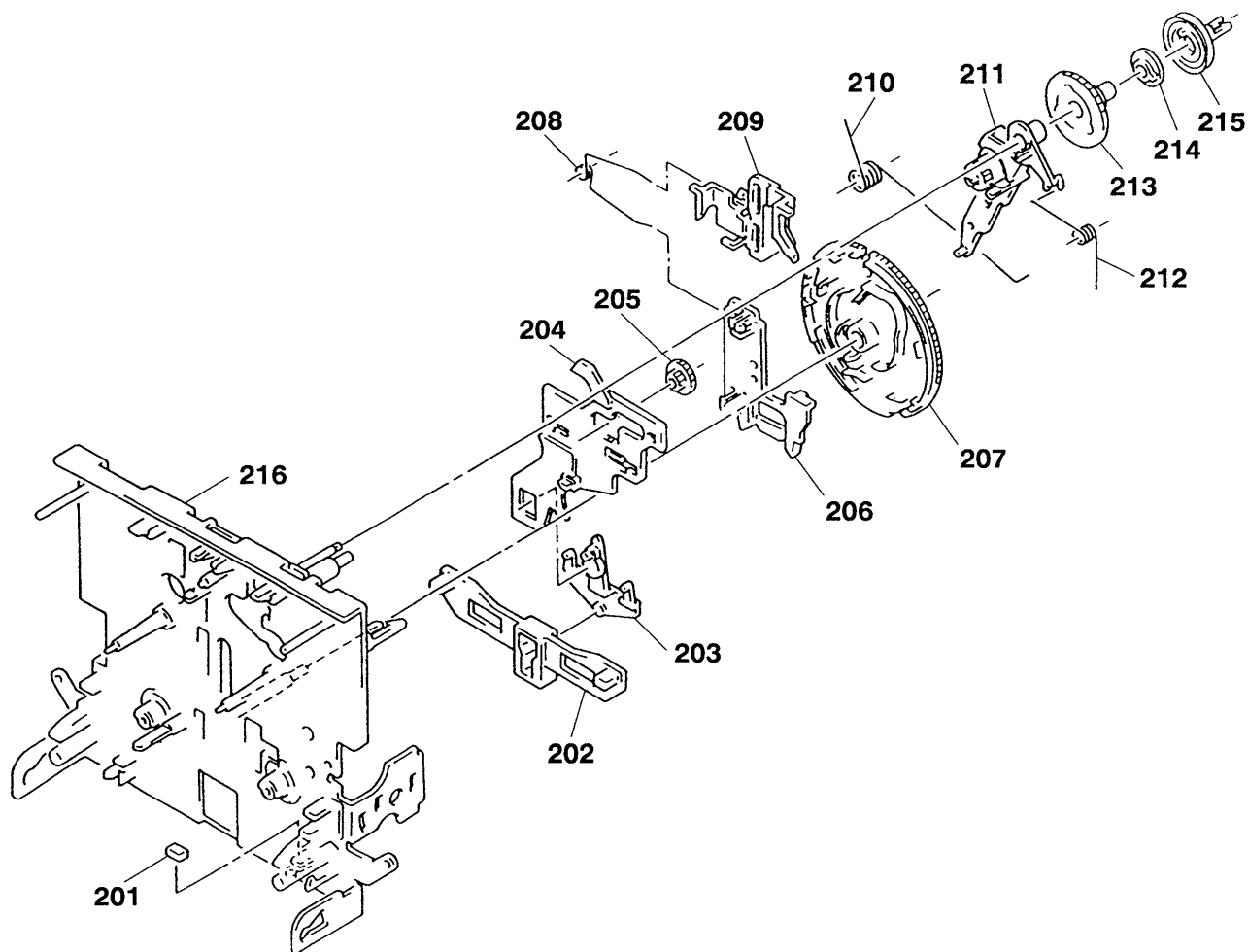


Ref.No.	Part No.	Description	Remark
151	X-3359-408-1	LEVER (PINCH LEVER FWD) ASSY	
152	3-359-455-01	SPRING, TORSION	
153	3-356-713-01	WASHER	
154	3-356-714-01	WASHER	
155	X-3359-409-1	LEVER (PINCH LEVER REV) ASSY	
156	3-362-308-01	CAP (REEL)	
157	X-3362-078-1	TABLE ASSY (B), REEL	
158	3-359-424-01	GEAR (REV GEAR)	
159	3-359-430-01	SPRING (CASSETTE RETAINER), LEAF	
160	X-3359-406-1	FLYWHEEL (FWD) ASSY	
161	X-3359-410-1	FLYWHEEL (REV) ASSY	
162	3-359-417-01	BELT (FLAT), CAPSTAN	
163	3-575-321-00	RETAINER, THRUST, CAPSTAN	
*164	3-359-436-01	BASE (THRUST RETAINER), FITTING	
165	3-359-414-01	SCREW (+PTWH 2X23)	
167	1-638-983-11	PC BOARD, MOTOR FLEXIBLE	

Ref.No.	Part No.	Description	Remark
*168	A-2006-399-A	MD (AX) BOARD, COMPLETE (DECK A)	
*168	A-2006-400-A	MD (BX) BOARD, COMPLETE (DECK B)	
169	3-359-466-01	BELT (FR), SQUARE	
*170	1-634-841-14	LEAF SW (A) BOARD (DECK A)	
*170	1-634-841-14	LEAF SW (B) BOARD (DECK B)	
171	3-343-419-01	HOLDER (S SENSOR A)	
172	X-3359-404-1	TABLE ASSY, REEL	
HP101	A-2003-837-F	BASE ASSY, HEAD (DECK A)	
HRP101	A-2003-838-F	DECK ASSY, HEAD (DECK B)	
		(including HE101)	
IC81A	8-719-710-03	PHOTO REFLECTOR NJL5165K-B (DECK A)	
IC81B	8-719-710-03	PHOTO REFLECTOR NJL5165K-B (DECK B)	
M1A	X-3365-377-1	MOTOR ASSY (CAPSTAN) (DECK A)	
M1B	X-3365-377-1	MOTOR ASSY (CAPSTAN) (DECK B)	
M2A	X-3363-501-1	MOTOR ASSY (REEL) (DECK A)	
M2B	X-3363-501-1	MOTOR ASSY (REEL) (DECK B)	

## 6-5. MECHANISM DECK SECTION-2

( DECK A : TCM-190RA12A )  
( DECK B : TCM-190RB22A )



Ref.No.	Part No.	Description	Remark
201	3-359-469-01	SPACER	
* 202	3-359-425-01	SLIDER (REVERSE SLIDER)	
203	3-359-426-01	LEVER (REVERSE LEVER)	
* 204	3-359-415-01	SLIDER (TRIGGER SLIDER)	
205	3-359-448-01	GEAR (TRIGGER)	
* 206	3-359-427-01	SLIDER (LEVERSE SLIDER)	
207	3-359-420-01	GEAR (CAM GEAR)	
208	3-359-454-01	SPRING, TORSION	

Ref.No.	Part No.	Description	Remark
209	3-359-429-01	SLIDER (BRAKE PLATE)	
210	3-359-456-01	SPRING (TRIGGER SPRING), TORSION	
211	X-3359-405-1	LEVER (FR ARM) ASSY	
212	3-359-453-01	SPRING (FR ARM), TORSION	
213	3-359-419-01	GEAR (FR GEAR)	
214	3-359-421-01	CLUTCH (REEL DISK)	
215	3-359-418-01	PULLEY (FR PULLEY)	
216	X-3363-790-1	CHASSIS ASSY, MECHANICAL	

# SECTION 7 ELECTRICAL PARTS LIST

DBS

H.P.

## NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS  
All resistors are in ohms.  
METAL: Metal-film resistor.  
METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable

- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS  
In each case, u :  $\mu$ , for example:  
uA... :  $\mu$ A..., uPA... :  $\mu$ PA...,  
uPB... :  $\mu$ PB..., uPC... :  $\mu$ PC..., uPD... :  $\mu$ PD...
- CAPACITORS  
uF :  $\mu$ F
- COILS  
uH :  $\mu$ H
- Abbreviations

JE: Tourist

SP: Singapore

G: German

CND: Canadian

EA: Saudi Arabia

AUS: Australian

IT: Italian

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref.No.	Part No.	Description	Remark
*	A-4365-228-A	DBS BOARD, COMPLETE *****	
		< CAPACITOR >	
C631	1-124-257-00	ELECT 2.2uF 20% 50V	
C632	1-162-282-31	CERAMIC 100PF 10% 50V	
C633	1-162-282-31	CERAMIC 100PF 10% 50V	
C634	1-124-252-00	ELECT 0.33uF 20% 50V	
C635	1-136-165-00	FILM 0.1uF 5% 50V	
C636	1-126-160-11	ELECT 1uF 20% 50V	
C637	1-124-257-00	ELECT 2.2uF 20% 50V	
C647	1-124-257-00	ELECT 2.2uF 20% 50V	
C638	1-124-229-00	ELECT 33uF 20% 10V	
C681	1-124-257-00	ELECT 2.2uF 20% 50V	
C682	1-162-282-31	CERAMIC 100PF 10% 50V	
C683	1-162-282-31	CERAMIC 100PF 10% 50V	
C684	1-124-252-00	ELECT 0.33uF 20% 50V	
C685	1-136-165-00	FILM 0.1uF 5% 50V	
C686	1-126-160-11	ELECT 1uF 20% 50V	
C687	1-124-257-00	ELECT 2.2uF 20% 50V	
C688	1-124-229-00	ELECT 33uF 20% 10V	
		< CONNECTOR >	
*CN605	1-564-336-00	PIN, CONNECTOR 2P	
*CN606	1-568-848-11	SOCKET, CONNECTOR 5P	
		< IC >	
IC631	8-759-634-51	IC M5218AP	
		< TRANSISTOR >	
Q631	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q641	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q681	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q691	8-729-141-30	TRANSISTOR 2SC3623A-LK	
		< RESISTOR >	
R631	1-249-417-11	CARBON 1K 5% 1/4W	

Ref.No.	Part No.	Description	Remark
R632	1-249-441-11	CARBON 100K 5% 1/4W	
R633	1-249-431-11	CARBON 15K 5% 1/4W	
R634	1-249-421-11	CARBON 2.2K 5% 1/4W	
R635	1-249-437-11	CARBON 47K 5% 1/4W	
R636	1-247-895-00	CARBON 470K 5% 1/4W	
R637	1-249-429-11	CARBON 10K 5% 1/4W	
R638	1-249-417-11	CARBON 1K 5% 1/4W	
R639	1-249-421-11	CARBON 2.2K 5% 1/4W	
R641	1-249-413-11	CARBON 470 5% 1/4W	
R642	1-249-433-11	CARBON 22K 5% 1/4W	
R643	1-249-433-11	CARBON 22K 5% 1/4W	
R644	1-249-441-11	CARBON 100K 5% 1/4W	
R647	1-249-417-11	CARBON 1K 5% 1/4W	
R681	1-249-417-11	CARBON 1K 5% 1/4W	
R682	1-249-441-11	CARBON 100K 5% 1/4W	
R683	1-249-431-11	CARBON 15K 5% 1/4W	
R684	1-249-421-11	CARBON 2.2K 5% 1/4W	
R685	1-249-437-11	CARBON 47K 5% 1/4W	
R686	1-247-895-00	CARBON 470K 5% 1/4W	
R687	1-249-429-11	CARBON 10K 5% 1/4W	
R688	1-249-417-11	CARBON 1K 5% 1/4W	
R689	1-249-421-11	CARBON 2.2K 5% 1/4W	
		< VARIABLE RESISTOR >	
RV631	1-223-490-11	RES, VAR, CARBON 50K/50K (DBS LEVEL)	
RV632	1-223-489-11	RES, VAR, CARBON 100K/100K (DBS FREQ)	
		*****	
*	1-649-252-11	H. P. BOARD *****	
		< CAPACITOR >	
C125	1-162-286-31	CERAMIC 220PF 10% 50V	
C175	1-162-286-31	CERAMIC 220PF 10% 50V	
		< CONNECTOR >	
*CN120	1-568-848-11	SOCKET, CONNECTOR 5P	

H.P.	LEAF SW (A)	LEAF SW (B)	MAIN
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Ref.No.	Part No.	Description	Remark
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< JACK >

CNJ121 1-750-032-11 JACK (DIA. 3.5) (HEADPHONES)

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\* 1-634-841-14 LEAF SW (A) BOARD

\*\*\*\*\*

< CONNECTOR >

\* CNP81 1-568-852-11 SOCKET, CONNECTOR 9P

< IC >

IC81 8-749-924-10 IC PHONT REFLECTOR NJL5165K-B(H1)

< RESISTOR >

R84 1-249-417-11 CARBON 1K 5% 1/4W

R85 1-249-408-11 CARBON 180 5% 1/4W

< SWITCH >

S81 1-571-958-11 SWITCH, PUSH (1 KEY) (STOP DET)

S82 1-571-281-21 SWITCH, LEAF (CrO2 DET)

S86 1-571-281-21 SWITCH, LEAF (HALF DET)

\*\*\*\*\*

\* 1-634-841-14 LEAF SW (B) BOARD

\*\*\*\*\*

< CONNECTOR >

\* CNP81 1-568-852-11 SOCKET, CONNECTOR 9P

< IC >

IC81 8-749-924-10 IC PHONT REFLECTOR NJL5165K-B(H1)

< RESISTOR >

R81 1-249-414-11 CARBON 560 5% 1/4W

R82 1-247-818-11 CARBON 300 5% 1/4W

R83 1-247-834-11 CARBON 1.3K 5% 1/4W

R84 1-249-417-11 CARBON 1K 5% 1/4W

R85 1-249-408-11 CARBON 180 5% 1/4W

< SWITCH >

S81 1-571-958-11 SWITCH, PUSH (1 KEY) (STOP DET)

S82 1-571-281-21 SWITCH, LEAF (CrO2 DET)

S83 1-571-281-21 SWITCH, LEAF (METAL DET)

S84 1-571-281-21 SWITCH, LEAF (ERASE PROOF DECK A)

S85 1-571-281-21 SWITCH, LEAF (ERASE PROOF DECK B)

S86 1-571-281-21 SWITCH, LEAF (HALF DET)

\*\*\*\*\*

Ref.No.	Part No.	Description	Remark
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\* A-4365-224-A MAIN BOARD, COMPLETE (US, CND)

\* A-4365-237-A MAIN BOARD, COMPLETE (AEP, UK, G, IT)

\* A-4365-247-A MAIN BOARD, COMPLETE (E, EA, SP, AUS, JE)

\*\*\*\*\*

\* 1-533-293-11 FUSE HOLDER

\* 3-309-144-21 HEAT SINK

\* 4-880-403-11 HEAT SINK

7-682-548-04 SCREW +BVTT 3X8 (S)

< CAPACITOR >

C501 1-124-907-11 ELECT 10uF 20% 50V

C502 1-162-282-31 CERAMIC 100PF 10% 50V

C503 1-162-282-31 CERAMIC 100PF 10% 50V (AEP, UK, G, IT)

C504 1-124-477-11 ELECT 47uF 20% 25V (AEP, UK, G, IT)

C505 1-161-377-00 CERAMIC 0.0047uF 30% 16V (AEP, UK, G, IT)

C506 1-161-374-11 CERAMIC 0.0015uF 20% 50V (AEP, UK, G, IT)

C507 1-124-464-11 ELECT 0.22uF 20% 50V (AEP, UK, G, IT)

C508 1-124-477-11 ELECT 47uF 20% 25V (AEP, UK, G, IT)

C512 1-162-282-31 CERAMIC 100PF 10% 50V

C514 1-162-282-31 CERAMIC 100PF 10% 50V

C521 1-161-379-00 CERAMIC 0.01uF 20% 25V

C522 1-161-379-00 CERAMIC 0.01uF 20% 25V

C531 1-161-374-11 CERAMIC 0.0015uF 20% 50V (E, EA, SP, AUS, JE)

C532 1-161-379-00 CERAMIC 0.01uF 20% 25V (E, EA, SP, AUS, JE)

C533 1-162-282-31 CERAMIC 100PF 10% 50V (E, EA, SP, AUS, JE)

C534 1-162-215-31 CERAMIC 47PF 5% 50V

C536 1-124-477-11 ELECT 47uF 20% 25V

C551 1-124-907-11 ELECT 10uF 20% 50V

C552 1-162-282-31 CERAMIC 100PF 10% 50V

C553 1-162-282-31 CERAMIC 100PF 10% 50V (AEP, UK, G, IT)

C554 1-124-477-11 ELECT 47uF 20% 25V (AEP, UK, G, IT)

C555 1-161-377-00 CERAMIC 0.0047uF 30% 16V (AEP, UK, G, IT)

C556 1-161-374-11 CERAMIC 0.0015uF 20% 50V (AEP, UK, G, IT)

C557 1-124-464-11 ELECT 0.22uF 20% 50V (AEP, UK, G, IT)

C558 1-124-477-11 ELECT 47uF 20% 25V (AEP, UK, G, IT)

C562 1-162-282-31 CERAMIC 100PF 10% 50V

C564 1-162-282-31 CERAMIC 100PF 10% 50V

C581 1-161-374-11 CERAMIC 0.0015uF 20% 50V (E, EA, SP, AUS, JE)

C582 1-161-379-00 CERAMIC 0.01uF 20% 25V (E, EA, SP, AUS, JE)

C583 1-162-282-31 CERAMIC 100PF 10% 50V (E, EA, SP, AUS, JE)

C584 1-162-215-31 CERAMIC 47PF 5% 50V

C586 1-124-477-11 ELECT 47uF 20% 25V

C601 1-162-286-31 CERAMIC 220PF 10% 50V

C602 1-161-379-00 CERAMIC 0.01uF 20% 25V

C603 1-161-379-00 CERAMIC 0.01uF 20% 25V

C604 1-110-340-11 MYLAR 270PF 5% 50V

C605 1-130-479-00 MYLAR 0.0047uF 5% 50V

C606 1-130-469-00 MYLAR 680PF 5% 50V

C607 1-136-154-00 FILM 0.012uF 5% 50V

Ref.No.	Part No.	Description	Remark		
C608	1-130-474-00	MYLAR	0.0018uF	5%	50V
C609	1-136-159-00	FILM	0.033uF	5%	50V
C610	1-130-478-00	MYLAR	0.0039uF	5%	50V
C611	1-136-163-00	FILM	0.068uF	5%	50V
C612	1-136-153-00	FILM	0.01uF	5%	50V
C613	1-136-168-00	FILM	0.18uF	5%	50V
C614	1-136-158-00	FILM	0.027uF	5%	50V
C615	1-124-465-00	ELECT	0.47uF	20%	50V
C616	1-136-163-00	FILM	0.068uF	5%	50V
C617	1-126-301-11	ELECT	1uF	20%	50V
C618	1-162-286-31	CERAMIC	220PF	10%	50V
C620	1-124-907-11	ELECT	10uF	20%	50V
C621	1-124-477-11	ELECT	47uF	20%	25V
C622	1-124-477-11	ELECT	47uF	20%	25V
C623	1-161-379-00	CERAMIC	0.01uF	20%	25V
C624	1-161-379-00	CERAMIC	0.01uF	20%	25V
C625	1-124-477-11	ELECT	47uF	20%	25V
C626	1-161-379-00	CERAMIC	0.01uF	20%	25V
C627	1-161-379-00	CERAMIC	0.01uF	20%	25V
C628	1-161-379-00	CERAMIC	0.01uF	20%	25V
C651	1-162-286-31	CERAMIC	220PF	10%	50V
C652	1-161-379-00	CERAMIC	0.01uF	20%	25V
C653	1-161-379-00	CERAMIC	0.01uF	20%	25V
C654	1-110-340-11	MYLAR	270PF	5%	50V
C655	1-130-479-00	MYLAR	0.0047uF	5%	50V
C656	1-130-469-00	MYLAR	680PF	5%	50V
C657	1-136-154-00	FILM	0.012uF	5%	50V
C658	1-130-474-00	MYLAR	0.0018uF	5%	50V
C659	1-136-159-00	FILM	0.033uF	5%	50V
C660	1-130-478-00	MYLAR	0.0039uF	5%	50V
C661	1-136-163-00	FILM	0.068uF	5%	50V
C662	1-136-153-00	FILM	0.01uF	5%	50V
C663	1-136-168-00	FILM	0.18uF	5%	50V
C664	1-136-158-00	FILM	0.027uF	5%	50V
C665	1-124-465-00	ELECT	0.47uF	20%	50V
C666	1-136-163-00	FILM	0.068uF	5%	50V
C667	1-126-301-11	ELECT	1uF	20%	50V
C668	1-162-286-31	CERAMIC	220PF	10%	50V
C670	1-124-907-11	ELECT	10uF	20%	50V
C901	1-136-153-00	FILM	0.01uF	5%	50V
C902	1-136-153-00	FILM	0.01uF	5%	50V
C903	1-126-936-11	ELECT	3300uF	20%	16V
C904	1-126-936-11	ELECT	3300uF	20%	16V
C905	1-124-907-11	ELECT	10uF	20%	50V
C906	1-124-907-11	ELECT	10uF	20%	50V
C907	1-124-907-11	ELECT	10uF	20%	50V
C908	1-126-925-11	ELECT	470uF	20%	10V
C909	1-126-925-11	ELECT	470uF	20%	10V

Ref.No.	Part No.	Description	Remark		
C910	1-124-477-11	ELECT	47uF	20%	25V
C911	1-124-907-11	ELECT	10uF	20%	50V
C913	1-124-907-11	ELECT	10uF	20%	50V
C914	1-124-907-11	ELECT	10uF	20%	50V
C915	1-124-907-11	ELECT	10uF	20%	50V
C916	1-126-927-11	ELECT	2200uF	20%	10V
C917	1-126-927-11	ELECT	2200uF	20%	10V

## &lt; CONNECTOR &gt;

*CN501	1-750-923-11	HOUSING, CONNECTOR (PC BOARD) 15P
CN601	1-691-767-11	PLUG (MICRO CONNECTOR) 5P
*CN603	1-568-836-11	SOCKET, CONNECTOR 17P
CN901	1-691-765-11	PLUG (MICRO CONNECTOR) 3P
CN902	1-691-766-11	PLUG (MICRO CONNECTOR) 4P

*CN903	1-568-834-11	SOCKET, CONNECTOR 15P
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## &lt; DIODE &gt;

D521	8-719-987-63	DIODE	1N4148M	
D522	8-719-987-63	DIODE	1N4148M	
D541	8-719-987-63	DIODE	1N4148M	(E, EA, SP, AUS, JE)
D542	8-719-987-63	DIODE	1N4148M	(E, EA, SP, AUS, JE)
D621	8-719-010-39	DIODE	UZ-5.1BSC	
D903	8-719-200-82	DIODE	11ES2	
D904	8-719-200-82	DIODE	11ES2	
D905	8-719-200-82	DIODE	11ES2	
D906	8-719-200-82	DIODE	11ES2	

## &lt; PLATE, GROUND &gt;

*E901	4-942-204-01	PLATE, GROUND
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## &lt; FUSE &gt;

△ F901	1-532-776-21	FUSE, MICRO (SECONDARY) (1A/125V) (US, CND)
△ F902	1-532-776-21	FUSE, MICRO (SECONDARY) (1A/125V) (US, CND)
△ F951	1-532-741-11	FUSE, GLASTUBE (1.25A/125V) (US, CND)
△ F951	1-532-285-00	FUSE (1.25A/250V) (EXCEPT US, CND)
△ F952	1-532-741-11	FUSE, GLASTUBE (1.25A/125V) (US, CND)
△ F952	1-532-285-00	FUSE (1.25A/250V) (EXCEPT US, CND)

## &lt; IC &gt;

IC501	8-759-634-51	IC	M5218AP	(AEP, UK, G, IT)
IC521	8-759-000-48	IC	MC14052BCP	
IC531	8-759-634-51	IC	M5218AP	
IC601	8-759-633-78	IC	M5289P	
IC621	8-759-081-01	IC	NJU7305L	

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



# MAIN

Ref.No.	Part No.	Description	Remark
IC622	8-759-000-48	IC MC14052BCP	
IC651	8-759-633-78	IC M5289P	
IC901	8-759-602-66	IC M5230L-A	
IC902	8-759-231-53	IC TA7805S	
IC903	8-759-605-00	IC M5F78M07L	
IC904	8-759-604-95	IC M5F79M07L	

< IC LINK >

△ ICP901	1-532-839-11	LINK, IC PRF1000/1A	(EXCEPT US, CND)
△ ICP902	1-532-839-11	LINK, IC PRF1000/1A	(EXCEPT US, CND)

< JACK >

J501	1-565-320-61	JACK, PIN 6P (VIDEO/PHONO, MD/DAT)	
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< TRANSISTOR >

Q511	8-729-141-30	TRANSISTOR	2SC3623A-LK	
Q521	8-729-900-61	TRANSISTOR	DTA114ES	
Q522	8-729-900-80	TRANSISTOR	DTC114ES	
Q541	8-729-202-67	TRANSISTOR	2SK246-GR3 (E, EA, SP, AUS, JE)	
Q542	8-729-202-67	TRANSISTOR	2SK246-GR3 (E, EA, SP, AUS, JE)	
Q543	8-729-119-76	TRANSISTOR	2SA1175-HFE (E, EA, SP, AUS, JE)	
Q544	8-729-141-30	TRANSISTOR	2SC3623A-LK (E, EA, SP, AUS, JE)	
Q545	8-729-141-30	TRANSISTOR	2SC3623A-LK (E, EA, SP, AUS, JE)	
Q561	8-729-141-30	TRANSISTOR	2SC3623A-LK	
Q903	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q904	8-729-209-15	TRANSISTOR	2SD2012	
Q907	8-729-141-83	TRANSISTOR	2SB1094-LK	
Q929	8-729-620-05	TRANSISTOR	2SC2603-EF	

< RESISTOR >

R501	1-249-417-11	CARBON	1K	5%	1/4W
R502	1-249-437-11	CARBON	47K	5%	1/4W
R503	1-249-416-11	CARBON	820	5%	1/4W (AEP, UK, G, IT)
R504	1-247-897-11	CARBON	560K	5%	1/4W (AEP, UK, G, IT)
R505	1-249-437-11	CARBON	47K	5%	1/4W (AEP, UK, G, IT)
R506	1-249-409-11	CARBON	220	5%	1/4W (AEP, UK, G, IT)
R507	1-249-441-11	CARBON	100K	5%	1/4W (AEP, UK, G, IT)
R508	1-249-409-11	CARBON	220	5%	1/4W (AEP, UK, G, IT)
R511	1-249-417-11	CARBON	1K	5%	1/4W
R512	1-249-441-11	CARBON	100K	5%	1/4W
R513	1-249-421-11	CARBON	2.2K	5%	1/4W
R514	1-249-421-11	CARBON	2.2K	5%	1/4W
R515	1-249-425-11	CARBON	4.7K	5%	1/4W
R516	1-249-427-11	CARBON	6.8K	5%	1/4W
R517	1-249-417-11	CARBON	1K	5%	1/4W
R521	1-249-429-11	CARBON	10K	5%	1/4W
R522	1-249-429-11	CARBON	10K	5%	1/4W
R523	1-249-433-11	CARBON	22K	5%	1/4W

R524	1-249-433-11	CARBON	22K	5%	1/4W
R532	1-249-437-11	CARBON	47K	5%	1/4W (E, EA, SP, AUS, JE)
R533	1-249-434-11	CARBON	27K	5%	1/4W (E, EA, SP, AUS, JE)
R534	1-249-437-11	CARBON	47K	5%	1/4W
R535	1-249-437-11	CARBON	47K	5%	1/4W
R537	1-249-437-11	CARBON	47K	5%	1/4W (EXCEPT US, CND)
R541	1-249-438-11	CARBON	56K	5%	1/4W (E, EA, SP, AUS, JE)
R542	1-249-441-11	CARBON	100K	5%	1/4W (E, EA, SP, AUS, JE)
R543	1-249-429-11	CARBON	10K	5%	1/4W (E, EA, SP, AUS, JE)
R544	1-249-433-11	CARBON	22K	5%	1/4W (E, EA, SP, AUS, JE)
R545	1-249-433-11	CARBON	22K	5%	1/4W (E, EA, SP, AUS, JE)
R546	1-249-429-11	CARBON	10K	5%	1/4W (E, EA, SP, AUS, JE)
R551	1-249-417-11	CARBON	1K	5%	1/4W
R552	1-249-437-11	CARBON	47K	5%	1/4W
R553	1-249-416-11	CARBON	820	5%	1/4W (AEP, UK, G, IT)
R554	1-247-897-11	CARBON	560K	5%	1/4W (AEP, UK, G, IT)
R555	1-249-437-11	CARBON	47K	5%	1/4W (AEP, UK, G, IT)
R556	1-249-409-11	CARBON	220	5%	1/4W (AEP, UK, G, IT)
R557	1-249-441-11	CARBON	100K	5%	1/4W (AEP, UK, G, IT)
R558	1-249-409-11	CARBON	220	5%	1/4W (AEP, UK, G, IT)
R561	1-249-417-11	CARBON	1K	5%	1/4W
R562	1-249-441-11	CARBON	100K	5%	1/4W
R563	1-249-421-11	CARBON	2.2K	5%	1/4W
R564	1-249-421-11	CARBON	2.2K	5%	1/4W
R565	1-249-425-11	CARBON	4.7K	5%	1/4W
R566	1-249-427-11	CARBON	6.8K	5%	1/4W
R567	1-249-417-11	CARBON	1K	5%	1/4W
R582	1-249-437-11	CARBON	47K	5%	1/4W (E, EA, SP, AUS, JE)
R583	1-249-434-11	CARBON	27K	5%	1/4W (E, EA, SP, AUS, JE)
R584	1-249-437-11	CARBON	47K	5%	1/4W
R585	1-249-437-11	CARBON	47K	5%	1/4W
R587	1-249-437-11	CARBON	47K	5%	1/4W (EXCEPT US, CND)
R601	1-249-425-11	CARBON	4.7K	5%	1/4W
R603	1-249-425-11	CARBON	4.7K	5%	1/4W
R604	1-247-903-00	CARBON	1M	5%	1/4W
R605	1-247-903-00	CARBON	1M	5%	1/4W
R606	1-247-903-00	CARBON	1M	5%	1/4W
R607	1-247-903-00	CARBON	1M	5%	1/4W
R608	1-247-903-00	CARBON	1M	5%	1/4W
R609	1-247-903-00	CARBON	1M	5%	1/4W
R610	1-247-903-00	CARBON	1M	5%	1/4W
R612	1-249-441-11	CARBON	100K	5%	1/4W
R620	1-247-807-31	CARBON	100	5%	1/4W
R621	1-249-417-11	CARBON	1K	5%	1/4W
R622	1-249-417-11	CARBON	1K	5%	1/4W
R623	1-249-425-11	CARBON	4.7K	5%	1/4W
R625	1-249-432-11	CARBON	18K	5%	1/4W
R626	1-249-428-11	CARBON	8.2K	5%	1/4W

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Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description	Remark		
R627	1-249-433-11	CARBON	22K	5%	1/4W
R628	1-249-433-11	CARBON	22K	5%	1/4W
R651	1-249-425-11	CARBON	4.7K	5%	1/4W
R653	1-249-425-11	CARBON	4.7K	5%	1/4W
R654	1-247-903-00	CARBON	1M	5%	1/4W
R655	1-247-903-00	CARBON	1M	5%	1/4W
R656	1-247-903-00	CARBON	1M	5%	1/4W
R657	1-247-903-00	CARBON	1M	5%	1/4W
R658	1-247-903-00	CARBON	1M	5%	1/4W
R659	1-247-903-00	CARBON	1M	5%	1/4W
R660	1-247-903-00	CARBON	1M	5%	1/4W
R662	1-249-441-11	CARBON	100K	5%	1/4W
R901	1-249-409-11	CARBON	220	5%	1/4W
R903	1-247-903-00	CARBON	1M	5%	1/4W
R904	1-249-414-11	CARBON	560	5%	1/4W
R905	1-249-431-11	CARBON	15K	5%	1/4W
R906	1-249-425-11	CARBON	4.7K	5%	1/4W
R907	1-249-431-11	CARBON	15K	5%	1/4W
R908	1-249-431-11	CARBON	15K	5%	1/4W
R925	1-249-433-11	CARBON	22K	5%	1/4W
R928	1-249-433-11	CARBON	22K	5%	1/4W
R948	1-249-414-11	CARBON	560	5%	1/4W

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\* A-2006-399-A MD (AX) BOARD, COMPLETE  
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## &lt; CAPACITOR &gt;

C11	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C12	1-136-157-00	FILM	0.022uF	5%	50V
C13	1-124-234-00	ELECT	22uF	20%	16V
C18	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C21	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C22	1-136-157-00	FILM	0.022uF	5%	50V
C23	1-124-234-00	ELECT	22uF	20%	16V
C28	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C31	1-124-234-00	ELECT	22uF	20%	16V
C32	1-124-234-00	ELECT	22uF	20%	16V
C72	1-124-499-11	ELECT, NONPOLAR	1uF	20%	50V

## &lt; CONNECTOR &gt;

\* CNJ31 1-580-782-11 CONNECTOR, BOARD TO BOARD  
\* CNP32 1-580-772-11 PIN, CONNECTOR (PC BOARD) 4P  
\* CNP71 1-564-719-11 PIN, CONNECTOR (SMALL TYPE) 3P  
\* CNJ72 1-580-411-11 SOCKET, CONNECTOR 4P

Ref.No.	Part No.	Description	Remark		
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## &lt; IC &gt;

IC31 8-759-106-02 IC uPC4570G2

## &lt; JUMPER RESISTOR &gt;

JW1	1-216-295-00	METAL CHIP	0	5%	1/10W
JW51	1-216-296-00	METAL CHIP	0	5%	1/8W
JW52	1-216-296-00	METAL CHIP	0	5%	1/8W
JW53	1-216-296-00	METAL CHIP	0	5%	1/8W
JW54	1-216-296-00	METAL CHIP	0	5%	1/8W

## &lt; TRANSISTOR &gt;

Q71 8-729-602-36 TRANSISTOR 2SA1602

## &lt; RESISTOR &gt;

R11	1-216-099-00	METAL CHIP	120K	5%	1/10W
R12	1-216-025-00	METAL CHIP	100	5%	1/10W
R13	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R14	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R21	1-216-099-00	METAL CHIP	120K	5%	1/10W
R22	1-216-025-00	METAL CHIP	100	5%	1/10W
R23	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R24	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R31	1-216-033-00	METAL CHIP	220	5%	1/10W
R32	1-216-033-00	METAL CHIP	220	5%	1/10W
R71	1-216-082-00	METAL GLAZE	24K	5%	1/10W
R72	1-216-081-00	METAL CHIP	22K	5%	1/10W
R73	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R74	1-216-089-91	METAL GLAZE	47K	5%	1/10W

## &lt; VARIABLE RESISTOR &gt;

RV11	1-238-012-11	RES, ADJ, CARBON	1K		
RV21	1-238-012-11	RES, ADJ, CARBON	1K		
RV71	1-241-630-11	RES, ADJ, CARBON	10K		
RV72	1-241-630-11	RES, ADJ, CARBON	10K		

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\* A-2006-400-A MD (BX) BOARD, COMPLETE  
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## &lt; CAPACITOR &gt;

C11	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C12	1-136-157-00	FILM	0.022uF	5%	50V
C13	1-124-234-00	ELECT	22uF	20%	16V
C14	1-136-273-91	FILM	75PF	5%	630V
C15	1-164-080-11	CERAMIC	390PF	10%	50V
C17	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C18	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C21	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C22	1-136-157-00	FILM	0.022uF	5%	50V

# MD (BX)

Ref.No.	Part No.	Description	Remark		
C23	1-124-234-00	ELECT	22uF	20%	16V
C24	1-136-273-91	FILM	75PF	5%	630V
C25	1-164-080-11	CERAMIC	390PF	10%	50V
C27	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C28	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C31	1-124-234-00	ELECT	22uF	20%	16V
C32	1-124-234-00	ELECT	22uF	20%	16V
C33	1-124-234-00	ELECT	22uF	20%	16V
C51	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C52	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C53	1-163-022-00	CERAMIC CHIP	0.012uF	10%	50V
C54	1-136-559-11	FILM	0.0047uF	5%	630V
C56	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C57	1-164-346-11	CERAMIC CHIP	1uF		16V
C58	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C72	1-124-499-11	ELECT, NONPOLAR	1uF	20%	50V

## < CONNECTOR >

*CNJ31	1-580-782-11	CONNECTOR, BOARD TO BOARD
*CNP32	1-580-781-11	PIN, CONNECTOR (PC BOARD) 7P
*CNJ33	1-580-782-11	CONNECTOR, BOARD TO BOARD
*CNP71	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P
*CNJ72	1-580-411-11	SOCKET, CONNECTOR 4P

## < DIODE >

D31	8-719-016-74	DIODE	1SS352
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## < IC >

IC31	8-759-106-02	IC	uPC4570G2
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## < JUMPER RESISTOR >

JW1	1-216-296-00	METAL CHIP	0	5%	1/8W
JW2	1-216-295-00	METAL CHIP	0	5%	1/10W
JW3	1-216-295-00	METAL CHIP	0	5%	1/10W
JW4	1-216-295-00	METAL CHIP	0	5%	1/10W
JW6	1-216-295-00	METAL CHIP	0	5%	1/10W
JW7	1-216-295-00	METAL CHIP	0	5%	1/10W
JW52	1-216-296-00	METAL CHIP	0	5%	1/8W
JW53	1-216-296-00	METAL CHIP	0	5%	1/8W
JW54	1-216-296-00	METAL CHIP	0	5%	1/8W
JW55	1-216-296-00	METAL CHIP	0	5%	1/8W
JW56	1-216-296-00	METAL CHIP	0	5%	1/8W
JW57	1-216-296-00	METAL CHIP	0	5%	1/8W
JW58	1-216-296-00	METAL CHIP	0	5%	1/8W
JW59	1-216-296-00	METAL CHIP	0	5%	1/8W
JW60	1-216-296-00	METAL CHIP	0	5%	1/8W

Ref.No.	Part No.	Description	Remark		
JW61	1-216-296-00	METAL CHIP	0	5%	1/8W

## < COIL >

L11	1-410-780-11	INDUCTOR	27mH
L21	1-410-780-11	INDUCTOR	27mH

## < TRANSISTOR >

Q51	8-729-808-01	TRANSISTOR	2SD1622-S
Q52	8-729-808-01	TRANSISTOR	2SD1622-S
Q53	8-729-808-01	TRANSISTOR	2SD1622-S
Q71	8-729-602-36	TRANSISTOR	2SA1602

## < RESISTOR >

R11	1-216-099-00	METAL CHIP	120K	5%	1/10W
R12	1-216-025-00	METAL CHIP	100	5%	1/10W
R13	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R14	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R15	1-249-430-11	CARBON	12K	5%	1/4W
R21	1-216-099-00	METAL CHIP	120K	5%	1/10W
R22	1-216-025-00	METAL CHIP	100	5%	1/10W
R23	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R24	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R25	1-249-430-11	CARBON	12K	5%	1/4W
R31	1-216-033-00	METAL CHIP	220	5%	1/10W
R32	1-216-033-00	METAL CHIP	220	5%	1/10W
R41	1-249-393-11	CARBON	10	5%	1/4W
R42	1-249-393-11	CARBON	10	5%	1/4W
R51	1-216-075-00	METAL CHIP	12K	5%	1/10W
R52	1-216-075-00	METAL CHIP	12K	5%	1/10W
R53	1-216-073-00	METAL CHIP	10K	5%	1/10W
R54	1-216-309-00	METAL CHIP	5.6	5%	1/10W
R55	1-216-309-00	METAL CHIP	5.6	5%	1/10W
R56	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R71	1-216-082-00	METAL GLAZE	24K	5%	1/10W
R72	1-216-081-00	METAL CHIP	22K	5%	1/10W
R73	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R74	1-216-089-91	METAL GLAZE	47K	5%	1/10W

## < VARIABLE RESISTOR >

RV11	1-238-012-11	RES, ADJ, CARBON	1K
RV12	1-238-551-11	RES, ADJ, CARBON	220K
RV21	1-238-012-11	RES, ADJ, CARBON	1K
RV22	1-238-551-11	RES, ADJ, CARBON	220K
RV71	1-241-630-11	RES, ADJ, CARBON	10K
RV72	1-241-630-11	RES, ADJ, CARBON	10K

## < RELAY >

RY31	1-515-913-11	RELAY
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MD (BX)

LED

PANEL

Ref.No.	Part No.	Description	Remark
< TRANSFORMER >			
T51	1-406-419-11	COIL, BIAS OSCILLATION	
*****			
*	1-649-254-11	LED BOARD	
*****			
< DIODE >			
D601	8-719-301-49	LED SEL2810A (DBS)	
*****			
*	A-4365-225-A	PANEL BOARD, COMPLETE (US, CND)	
*	A-4365-238-A	PANEL BOARD, COMPLETE (AEP, UK, G, IT)	
*	A-4365-248-A	PANEL BOARD, COMPLETE (E, EA, SP, AUS, JE)	
*****			
*	4-496-311-01	HOLDER, FL TUBE	
< CAPACITOR >			
C811	1-136-165-00	FILM 0.1uF 5% 50V	
C813	1-126-157-11	ELECT 10uF 20% 16V	
C814	1-136-173-00	FILM 0.47uF 5% 50V	
C815	1-164-159-11	CERAMIC 0.1uF 50V	
C816	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C817	1-124-907-11	ELECT 10uF 20% 50V	
C818	1-164-159-11	CERAMIC 0.1uF 50V	
C819	1-164-159-11	CERAMIC 0.1uF 50V	
< CONNECTOR >			
*CN804	1-568-864-11	SOCKET, CONNECTOR 21P	
< DIODE >			
D813	8-719-987-63	DIODE 1N4148M	
D851	8-719-987-63	DIODE 1N4148M	
D891	8-719-301-37	LED SEL2210S-CD (ON/STANDBY)	
D892	8-719-301-37	LED SEL2210S-CD (TAPE)	
D893	8-719-301-37	LED SEL2210S-CD (MD/DAT)	
D894	8-719-301-37	LED SEL2210S-CD (CD)	
D895	8-719-301-37	LED SEL2210S-CD (TUNER)	
D896	8-719-301-37	LED SEL2210S-CD (PHONO)	
< FLUORESCENT INDICATOR TUBE >			
FL801	1-517-216-11	INDICATOR TUBE, FLUORESCENT	
< IC >			
IC811	8-759-605-16	IC M51953BL	
IC821	8-759-184-20	IC TMP87CC78F-6104	
< TRANSISTOR >			
Q811	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q851	8-729-620-05	TRANSISTOR 2SC2603-EF	

Ref.No.	Part No.	Description	Remark
Q891	8-729-900-80	TRANSISTOR DTC114ES	
Q892	8-729-900-80	TRANSISTOR DTC114ES	
Q893	8-729-900-80	TRANSISTOR DTC114ES	
Q894	8-729-900-80	TRANSISTOR DTC114ES	
Q895	8-729-900-80	TRANSISTOR DTC114ES	
Q896	8-729-900-80	TRANSISTOR DTC114ES	
< RESISTOR >			
R811	1-249-429-11	CARBON 10K 5% 1/4W	
R812	1-249-433-11	CARBON 22K 5% 1/4W	
R813	1-249-433-11	CARBON 22K 5% 1/4W	
R832	1-249-429-11	CARBON 10K 5% 1/4W (AEP, UK, G, IT)	
R833	1-249-429-11	CARBON 10K 5% 1/4W (E, EA, SP, AUS, JE)	
R834	1-249-429-11	CARBON 10K 5% 1/4W	
R835	1-249-429-11	CARBON 10K 5% 1/4W	
R837	1-249-429-11	CARBON 10K 5% 1/4W	
R838	1-249-429-11	CARBON 10K 5% 1/4W	
R841	1-247-903-00	CARBON 1M 5% 1/4W	
R847	1-249-429-11	CARBON 10K 5% 1/4W	
R848	1-249-429-11	CARBON 10K 5% 1/4W	
R855	1-249-429-11	CARBON 10K 5% 1/4W	
R856	1-249-429-11	CARBON 10K 5% 1/4W	
R857	1-249-429-11	CARBON 10K 5% 1/4W	
R858	1-249-393-11	CARBON 10 5% 1/4W	
R861	1-249-423-11	CARBON 3.3K 5% 1/4W	
R862	1-249-413-11	CARBON 470 5% 1/4W	
R863	1-249-415-11	CARBON 680 5% 1/4W	
R864	1-249-417-11	CARBON 1K 5% 1/4W	
R865	1-249-419-11	CARBON 1.5K 5% 1/4W	
R866	1-249-421-11	CARBON 2.2K 5% 1/4W	
R867	1-249-425-11	CARBON 4.7K 5% 1/4W	
R871	1-249-423-11	CARBON 3.3K 5% 1/4W	
R872	1-249-413-11	CARBON 470 5% 1/4W	
R873	1-249-415-11	CARBON 680 5% 1/4W	
R874	1-249-417-11	CARBON 1K 5% 1/4W	
R891	1-249-411-11	CARBON 330 5% 1/4W	
< SWITCH >			
S861	1-572-184-11	SWITCH, KEYBOARD (ON/STANBY)	
S862	1-572-184-11	SWITCH, KEYBOARD (DISPLAY)	
S863	1-572-184-11	SWITCH, KEYBOARD (TAPE)	
S864	1-572-184-11	SWITCH, KEYBOARD (KARAOKE) (E, EA, SP, AUS, JE)	
S865	1-572-184-11	SWITCH, KEYBOARD (CD)	
S866	1-572-184-11	SWITCH, KEYBOARD (TUNER)	
S867	1-572-184-11	SWITCH, KEYBOARD (PHONO)	
S871	1-572-184-11	SWITCH, KEYBOARD (EFFECT)	
S872	1-572-184-11	SWITCH, KEYBOARD (KARAOKE) (E, EA, SP, AUS, JE)	
S873	1-572-184-11	SWITCH, KEYBOARD (P.FILE)	
S874	1-572-184-11	SWITCH, KEYBOARD (PRESET)	

# PANEL

# POWER

Ref.No.	Part No.	Description	Remark
< VIBRATOR >			
X821	1-579-599-21	VIBRATOR, CERAMIC (8.38MHZ)	
*****			
*	A-4365-234-A	POWER BOARD, COMPLETE	(US,CND)
*	A-4365-239-A	POWER BOARD, COMPLETE	(AEP,UK)
*	A-4365-249-A	POWER BOARD, COMPLETE	(E,JE)
*	A-4365-251-A	POWER BOARD, COMPLETE	(EA,SP,AUS)
*	A-4365-252-A	POWER BOARD, COMPLETE	(G,IT)
*****			
	1-751-670-21	LEAD (WITH CONNECTOR) (4 CORE)	(E,EA,SP,AUS,JE)
*	1-533-293-11	FUSE HOLDER	
< CAPACITOR >			
C101	1-136-165-00	FILM 0.1uF 5% 50V	
C102	1-136-165-00	FILM 0.1uF 5% 50V	
C103	1-126-138-11	ELECT 4700uF 20% 50V	(EXCEPT AEP, G, IT, UK)
C103	1-126-224-11	ELECT 4700uF 20% 42V (AEP, UK, G, IT)	
C104	1-126-138-11	ELECT 4700uF 20% 50V	(EXCEPT AEP, G, IT, UK)
C104	1-126-224-11	ELECT 4700uF 20% 42V (AEP, UK, G, IT)	
C105	1-124-791-11	ELECT 1.0uF 20% 100V	
C106	1-126-969-11	ELECT 220uF 20% 50V	
C107	1-136-153-00	FILM 0.01uF 5% 50V	
C108	1-136-153-00	FILM 0.01uF 5% 50V	
C111	1-124-122-11	ELECT 100uF 20% 50V	
C112	1-124-907-11	ELECT 10uF 20% 50V	
C113	1-124-910-11	ELECT 47uF 20% 50V	
C114	1-164-159-11	CERAMIC 0.1uF 50V	
C123	1-136-163-00	FILM 0.068uF 5% 50V (G, IT)	
C124	1-136-163-00	FILM 0.068uF 5% 50V (G, IT)	
C141	1-126-176-11	ELECT 220uF 20% 10V	
C142	1-126-176-11	ELECT 220uF 20% 10V	
C143	1-124-443-00	ELECT 100uF 20% 10V	
C173	1-136-163-00	FILM 0.068uF 5% 50V (G, IT)	
C174	1-136-163-00	FILM 0.068uF 5% 50V (G, IT)	
C181	1-124-477-11	ELECT 47uF 20% 25V	
C182	1-124-927-11	ELECT 4.7uF 20% 100V	
C183	1-124-477-11	ELECT 47uF 20% 25V	
C184	1-136-169-00	FILM 0.22uF 5% 50V	
C185	1-136-169-00	FILM 0.22uF 5% 50V	
C186	1-124-903-11	ELECT 1uF 20% 50V	
C187	1-124-907-11	ELECT 10uF 20% 50V	
C188	1-161-379-00	CERAMIC 0.01uF 20% 25V	
< CONNECTOR >			
*CN102	1-564-321-00	PIN, CONNECTOR 2P	(US,CND,AEP,UK,G,IT)

Ref.No.	Part No.	Description	Remark
CN102	1-568-106-11	PIN, CONNECTOR 4P	(E,EA,SP,AUS,JE)
*CN103	1-564-338-00	PIN, CONNECTOR 4P	
CN104	1-691-769-21	PLUG (MICRO CONNECTOR) 7P	
*CN105	1-568-848-11	SOCKET, CONNECTOR 5P	
*CN106	1-564-337-00	PIN, CONNECTOR 3P	
CN107	1-691-766-11	PLUG (MICRO CONNECTOR) 4P	
*CN108	1-564-506-11	PLUG, CONNECTOR 3P	
CN109	1-691-769-11	PLUG (MICRO CONNECTOR) 7P	
< CONNECTOR >			
CNP101	1-526-930-11	INLET, AC	(US,CND,E,JE)
CNP101	1-526-931-11	INLET, AC	(AEP,UK,G,IT,EA,SP,AUS)
< DIODE >			
D101	8-719-987-63	DIODE 1N4148M	
D102	8-719-987-63	DIODE 1N4148M	
D103	8-719-987-63	DIODE 1N4148M	
D104	8-719-510-68	DIODE D5SBA20F01	
D105	8-719-987-63	DIODE 1N4148M	
D106	8-719-987-63	DIODE 1N4148M	
D107	8-719-200-82	DIODE 11ES2	
D108	8-719-200-82	DIODE 11ES2	
D111	8-719-200-82	DIODE 11ES2	
D112	8-719-934-22	DIODE HZS30-2L	
D113	8-719-014-80	DIODE UZP-6.2BC-TP	
D121	8-719-987-63	DIODE 1N4148M	
D141	8-719-987-63	DIODE 1N4148M	
D142	8-719-987-63	DIODE 1N4148M	
D171	8-719-987-63	DIODE 1N4148M	
D181	8-719-001-91	DIODE UZL-15M	
D182	8-719-987-63	DIODE 1N4148M	
D183	8-719-987-63	DIODE 1N4148M	
D184	8-719-200-82	DIODE 11ES2	
D185	8-719-200-82	DIODE 11ES2	
D186	8-719-200-82	DIODE 11ES2	
< PLATE, GROUND >			
*E101	4-942-204-01	PLATE, GROUND	
< FUSE >			
△F101	1-532-746-11	FUSE, GLASS TUBE (4A/125V)	(US,CND)
△F101	1-532-259-00	FUSE, (T1.6AL/250V)	(AEP,UK,G,IT)
△F102	1-532-350-00	FUSE, (T3.15AL)	(E,EA,SP,AUS,JE)
△F103	1-532-203-00	FUSE, (T1.6AL/125V)	(E,EA,SP,AUS,JE)
< IC >			
IC141	8-759-111-68	IC uPC1237HA	
IC181	8-759-103-93	IC uPC393C	

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

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## POWER

## POWER AMPLIFIER

Ref.No.	Part No.	Description	Remark
< JACK >			
J101	1-537-151-11	TERMINAL BOARD (SPEAKER)	
*J102	1-565-352-11	JACK, PIN 2P (SURROUND SPEAKER)	(EXCEPT US, CND)
< COIL >			
L101	1-424-485-11	FILTER, LINE	(AEP, UK, G, IT)
< TRANSISTOR >			
Q101	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q102	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q111	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q141	8-729-900-63	TRANSISTOR DTA124ES	
Q181	8-729-118-01	TRANSISTOR 2SB1116-K	
Q182	8-729-118-01	TRANSISTOR 2SB1116-K	
< RESISTOR >			
R101	1-249-433-11	CARBON 22K 5% 1/4W	
R102	1-249-433-11	CARBON 22K 5% 1/4W	
R103	1-249-433-11	CARBON 22K 5% 1/4W	
R104	1-249-433-11	CARBON 22K 5% 1/4W	
R105	1-215-891-11	METAL OXIDE 680 5% 2W	(EXCEPT AEP, G, IT, UK)
R105	1-215-890-11	METAL OXIDE 470 5% 2W	(AEP, UK, G, IT)
R106	1-215-889-00	METAL OXIDE 330 5% 2W F	(EXCEPT AEP, G, IT, UK)
R106	1-216-453-00	METAL OXIDE 270 5% 2W F	(AEP, UK, G, IT)
R107	1-219-136-11	FUSIBLE 0.22 5% 1/4W F	
R108	1-219-136-11	FUSIBLE 0.22 5% 1/4W F	
R112	1-249-421-11	CARBON 2.2K 5% 1/4W	
R113	1-249-413-11	CARBON 470 5% 1/4W	
R114	1-249-413-11	CARBON 470 5% 1/4W	
R115	1-249-425-11	CARBON 4.7K 5% 1/4W	
R121	1-249-417-11	CARBON 1K 5% 1/4W	
R122	1-249-417-11	CARBON 1K 5% 1/4W	
R123	1-249-438-11	CARBON 56K 5% 1/4W	
R124	1-249-435-11	CARBON 33K 5% 1/4W	
R125	1-249-397-11	CARBON 22 5% 1/4W	(G, IT)
R126	1-249-397-11	CARBON 22 5% 1/4W	(G, IT)
R141	1-249-421-11	CARBON 2.2K 5% 1/4W	
R142	1-249-441-11	CARBON 100K 5% 1/4W	
R143	1-249-429-11	CARBON 10K 5% 1/4W	
R144	1-249-441-11	CARBON 100K 5% 1/4W	
R145	1-249-437-11	CARBON 47K 5% 1/4W	
R146	1-249-430-11	CARBON 12K 5% 1/4W	
R171	1-249-417-11	CARBON 1K 5% 1/4W	
R172	1-249-417-11	CARBON 1K 5% 1/4W	
R173	1-249-437-11	CARBON 47K 5% 1/4W	

Ref.No.	Part No.	Description	Remark
R174	1-249-435-11	CARBON 33K 5% 1/4W	
R175	1-249-397-11	CARBON 22 5% 1/4W	(G, IT)
R176	1-249-397-11	CARBON 22 5% 1/4W	(G, IT)
R181	1-249-441-11	CARBON 100K 5% 1/4W	
R182	1-249-429-11	CARBON 10K 5% 1/4W	
R183	1-249-425-11	CARBON 4.7K 5% 1/4W	
R184	1-249-416-11	CARBON 820 5% 1/4W	
R185	1-249-426-11	CARBON 5.6K 5% 1/4W	
R186	1-249-426-11	CARBON 5.6K 5% 1/4W	
R187	1-249-441-11	CARBON 100K 5% 1/4W	
R188	1-249-426-11	CARBON 5.6K 5% 1/4W	
R189	1-249-441-11	CARBON 100K 5% 1/4W	
R191	1-202-725-00	SOLID 3.3M 10% 1/2W	(US, CND)
< RELAY >			
RY101	1-515-738-11	RELAY, POWER	
RY102	1-515-738-11	RELAY, POWER	
RY103	1-515-920-11	RELAY (24V)	
< SWITCH >			
AS101	1-692-328-11	SELECTOR, VOLTAGE	(VOLTAGE SELECTOR) (E, EA, SP, AUS, JE)
*****			
*	A-4365-235-A	POWER AMPLIFIER BOARD, COMPLETE	(US, CND, E, EA, SP, AUS, JE)
*	A-4365-240-A	POWER AMPLIFIER BOARD, COMPLETE	(AEP, UK)
*	A-4365-253-A	POWER AMPLIFIER BOARD, COMPLETE	(G, IT)
*****			
< CAPACITOR >			
C701	1-124-925-11	ELECT 2.2uF 20% 100V	
C702	1-162-286-31	CERAMIC 220PF 10% 50V	
C703	1-162-282-31	CERAMIC 100PF 10% 50V	
C704	1-124-477-11	ELECT 47uF 20% 25V	
C705	1-124-910-11	ELECT 47uF 20% 50V	
C706	1-124-122-11	ELECT 100uF 20% 50V	
C707	1-124-927-11	ELECT 4.7uF 20% 100V	
C708	1-124-916-11	ELECT 22uF 20% 63V	
C709	1-136-165-00	FILM 0.1uF 5% 50V	
C710	1-136-163-00	FILM 0.068uF 5% 50V	
C711	1-136-163-00	FILM 0.068uF 5% 50V	
C731	1-161-379-00	CERAMIC 0.01uF 20% 25V	(G, IT)
C732	1-161-379-00	CERAMIC 0.01uF 20% 25V	(G, IT)
C733	1-161-379-00	CERAMIC 0.01uF 20% 25V	(G, IT)
C735	1-124-910-11	ELECT 47uF 20% 50V	
C744	1-164-159-11	CERAMIC 0.1uF 50V	
C751	1-124-925-11	ELECT 2.2uF 20% 100V	
C752	1-162-286-31	CERAMIC 220PF 10% 50V	

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# POWER AMPLIFIER

# SUB PANEL

Ref.No.	Part No.	Description	Remark
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C753	1-162-282-31	CERAMIC 100PF	10% 50V
C754	1-124-477-11	ELECT 47uF	20% 25V
C755	1-124-910-11	ELECT 47uF	20% 50V
C756	1-124-122-11	ELECT 100uF	20% 50V
C757	1-124-927-11	ELECT 4.7uF	20% 100V
C760	1-136-163-00	FILM 0.068uF	5% 50V
C761	1-136-163-00	FILM 0.068uF	5% 50V

< DIODE >

D701	8-719-987-63	DIODE 1N4148M	
D751	8-719-987-63	DIODE 1N4148M	

< IC >

IC701	8-749-900-24	IC STK-4162MK2	(EXCEPT AEP, UK, G, IT)
IC701	8-749-920-09	IC STK-4152MK2K	(AEP, UK, G, IT)
IC703	8-759-947-34	IC LM35DZ	

< COIL >

L701	1-420-872-00	COIL, AIR CORE	
L751	1-420-872-00	COIL, AIR CORE	

< TRANSISTOR >

Q701	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q732	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q733	8-729-900-80	TRANSISTOR DTC114ES	
Q751	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	

< RESISTOR >

R701	1-249-417-11	CARBON 1K 5%	1/4W
R702	1-249-438-11	CARBON 56K 5%	1/4W
R703	1-249-417-11	CARBON 1K 5%	1/4W
R704	1-249-438-11	CARBON 56K 5%	1/4W
R705	1-249-425-11	CARBON 4.7K 5%	1/4W
R706	1-249-425-11	CARBON 4.7K 5%	1/4W
R707	1-249-425-11	CARBON 4.7K 5%	1/4W
R708	1-249-425-11	CARBON 4.7K 5%	1/4W
△ R709	1-212-881-11	FUSIBLE 100 5%	1/4W F
△ R710	1-217-151-00	RES, METAL PLATE 0.22 2W	F
R711	1-249-417-11	CARBON 1K 5%	1/4W
R712	1-249-431-11	CARBON 15K 5%	1/4W
R713	1-249-441-11	CARBON 100K 5%	1/4W
R714	1-249-421-11	CARBON 2.2K 5%	1/4W
R715	1-249-421-11	CARBON 2.2K 5%	1/4W
R716	1-249-421-11	CARBON 2.2K 5%	1/4W
R717	1-249-421-11	CARBON 2.2K 5%	1/4W
R718	1-249-397-11	CARBON 22 5%	1/4W
R719	1-249-397-11	CARBON 22 5%	1/4W
R720	1-249-397-11	CARBON 22 5%	1/4W

Ref.No.	Part No.	Description	Remark
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R721	1-249-397-11	CARBON 22 5%	1/4W
R722	1-249-429-11	CARBON 10K 5%	1/4W
R723	1-247-881-00	CARBON 120K 5%	1/4W
R724	1-249-437-11	CARBON 47K 5%	1/4W
R732	1-249-426-11	CARBON 5.6K 5%	1/4W

R733	1-249-433-11	CARBON 22K 5%	1/4W
R734	1-249-437-11	CARBON 47K 5%	1/4W
R735	1-249-439-11	CARBON 68K 5%	1/4W
R736	1-249-417-11	CARBON 1K 5%	1/4W
R751	1-249-417-11	CARBON 1K 5%	1/4W

R752	1-249-438-11	CARBON 56K 5%	1/4W
R753	1-249-417-11	CARBON 1K 5%	1/4W
R754	1-249-438-11	CARBON 56K 5%	1/4W
R755	1-249-425-11	CARBON 4.7K 5%	1/4W
R756	1-249-425-11	CARBON 4.7K 5%	1/4W

R757	1-249-425-11	CARBON 4.7K 5%	1/4W
R758	1-249-425-11	CARBON 4.7K 5%	1/4W
△ R759	1-212-881-11	FUSIBLE 100 5%	1/4W F
△ R760	1-217-151-00	RES, METAL PLATE 0.22 2W	F
R761	1-249-417-11	CARBON 1K 5%	1/4W

R762	1-249-431-11	CARBON 15K 5%	1/4W
R763	1-249-441-11	CARBON 100K 5%	1/4W
R768	1-249-397-11	CARBON 22 5%	1/4W
R769	1-249-397-11	CARBON 22 5%	1/4W
R770	1-249-397-11	CARBON 22 5%	1/4W

R771	1-249-397-11	CARBON 22 5%	1/4W
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\* A-4365-226-A SUB PANEL BOARD, COMPLETE

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< CAPACITOR >

C641	1-161-379-00	CERAMIC 0.01uF	20% 25V
C642	1-124-907-11	ELECT 10uF	20% 50V
C801	1-161-379-00	CERAMIC 0.01uF	20% 25V
C802	1-161-379-00	CERAMIC 0.01uF	20% 25V
C803	1-124-907-11	ELECT 10uF	20% 50V

C804	1-162-294-31	CERAMIC 0.001uF	10% 50V
C805	1-124-907-11	ELECT 10uF	20% 50V
C806	1-161-379-00	CERAMIC 0.01uF	20% 25V
C807	1-124-907-11	ELECT 10uF	20% 50V
C808	1-124-907-11	ELECT 10uF	20% 50V

< CONNECTOR >

*CN607	1-568-848-11	SOCKET, CONNECTOR 5P
CN609	1-691-765-11	PLUG (MICRO CONNECTOR) 3P
*CN802	1-568-836-11	SOCKET, CONNECTOR 17P
CN803	1-568-838-11	SOCKET, CONNECTOR 21P

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## SUB PANEL

## TC MAIN

Ref.No.	Part No.	Description	Remark
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## &lt; DIODE &gt;

D641	8-719-200-82	DIODE 11ES2	
D801	8-719-010-39	DIODE UZ-5.1BSC	
D802	8-719-010-39	DIODE UZ-5.1BSC	

## &lt; IC &gt;

IC641	8-759-184-40	IC LB1638	
IC801	8-759-991-11	IC XR1091DCP	
IC802	8-759-000-48	IC MC14052BCP	

## &lt; TRANSISTOR &gt;

Q643	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q821	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q822	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q823	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q824	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q825	8-729-620-05	TRANSISTOR 2SC2603-EF	

## &lt; RESISTOR &gt;

R645	1-249-429-11	CARBON 10K 5% 1/4W	
R646	1-249-429-11	CARBON 10K 5% 1/4W	
R648	1-249-411-11	CARBON 330 5% 1/4W	
R801	1-247-807-31	CARBON 100 5% 1/4W	
R802	1-247-807-31	CARBON 100 5% 1/4W	
R803	1-249-429-11	CARBON 10K 5% 1/4W	
R804	1-249-429-11	CARBON 10K 5% 1/4W	
R805	1-249-419-11	CARBON 1.5K 5% 1/4W	
R806	1-249-429-11	CARBON 10K 5% 1/4W	
R807	1-249-435-11	CARBON 33K 5% 1/4W	
R808	1-249-435-11	CARBON 33K 5% 1/4W	
R809	1-249-429-11	CARBON 10K 5% 1/4W	
R821	1-249-429-11	CARBON 10K 5% 1/4W	
R822	1-249-429-11	CARBON 10K 5% 1/4W	
R823	1-249-429-11	CARBON 10K 5% 1/4W	
R824	1-249-429-11	CARBON 10K 5% 1/4W	
R825	1-249-429-11	CARBON 10K 5% 1/4W	
R830	1-249-429-11	CARBON 10K 5% 1/4W	

## &lt; VARIABLE RESISTOR &gt;

RV601	1-223-487-11	RES, VAR, CARBON 100K/100K (VOLUME)	
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*	A-4365-221-A	TC MAIN BOARD, COMPLETE (EXCEPT US,CND)
*	A-4365-233-A	TC MAIN BOARD, COMPLETE (US,CND)

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1-696-746-11	WIRE (FLAT TYPE) (15 CORE)
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Ref.No.	Part No.	Description	Remark
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## &lt; CAPACITOR &gt;

C105	1-106-351-00	MYLAR 2200PF 5% 200V	(EXCEPT US,CND)
C106	1-106-351-00	MYLAR 2200PF 5% 200V	(EXCEPT US,CND)
C107	1-136-174-00	FILM 0.56uF 5% 50V	(EXCEPT US,CND)
C108	1-136-171-00	FILM 0.33uF 5% 50V	(EXCEPT US,CND)
C201	1-136-158-00	FILM 0.027uF 5% 50V	
C202	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C203	1-124-254-00	ELECT 0.68uF 20% 50V	(US,CND)
C204	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C205	1-124-925-11	ELECT 2.2uF 20% 100V	
C206	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C207	1-126-157-11	ELECT 10uF 20% 16V	
C208	1-164-005-11	CERAMIC CHIP 0.47uF 25V	
C209	1-126-301-11	ELECT 1uF 20% 50V	(US,CND)
C209	1-124-925-11	ELECT 2.2uF 20% 100V	(EXCEPT US,CND)
C210	1-124-925-11	ELECT 2.2uF 20% 100V	
C215	1-106-351-00	MYLAR 2200PF 5% 200V	(EXCEPT US,CND)
C216	1-106-351-00	MYLAR 2200PF 5% 200V	(EXCEPT US,CND)
C217	1-136-174-00	FILM 0.56uF 5% 50V	(EXCEPT US,CND)
C218	1-136-171-00	FILM 0.33uF 5% 50V	(EXCEPT US,CND)
C301	1-136-158-00	FILM 0.027uF 5% 50V	
C302	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C303	1-124-254-00	ELECT 0.68uF 20% 50V	(US,CND)
C304	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C305	1-124-925-11	ELECT 2.2uF 20% 100V	
C306	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C307	1-126-157-11	ELECT 10uF 20% 16V	
C308	1-164-005-11	CERAMIC CHIP 0.47uF 25V	
C309	1-126-301-11	ELECT 1uF 20% 50V	(US,CND)
C309	1-124-925-11	ELECT 2.2uF 20% 100V	(EXCEPT US,CND)
C401	1-124-443-00	ELECT 100uF 20% 10V	(US,CND)
C401	1-124-584-00	ELECT 100uF 20% 10V	(EXCEPT US,CND)
C402	1-163-038-00	CERAMIC CHIP 0.1uF 25V	
C403	1-163-038-00	CERAMIC CHIP 0.1uF 25V	
C404	1-124-443-00	ELECT 100uF 20% 10V	(US,CND)
C404	1-124-584-00	ELECT 100uF 20% 10V	(EXCEPT US,CND)
C405	1-124-443-00	ELECT 100uF 20% 10V	(US,CND)
C405	1-124-584-00	ELECT 100uF 20% 10V	(EXCEPT US,CND)



# TC MAIN

Ref.No.	Part No.	Description	Remark		
C407	1-124-925-11	ELECT	2.2uF	20%	100V
C408	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C409	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C410	1-124-925-11	ELECT	2.2uF	20%	100V
C411	1-163-133-00	CERAMIC CHIP	470PF	5%	50V (US, CND)
C411	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V (EXCEPT US, CND)
C412	1-126-301-11	ELECT	1uF	20%	50V (US, CND)
C413	1-124-443-00	ELECT	100uF	20%	10V (US, CND)
C414	1-124-443-00	ELECT	100uF	20%	10V (US, CND)
C415	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C416	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C417	1-124-907-11	ELECT	10uF	20%	0V
C419	1-124-473-11	ELECT	1000uF	20%	10V
C420	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C421	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C422	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C424	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C425	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C426	1-124-478-11	ELECT	100uF	20%	25V
C427	1-124-478-11	ELECT	100uF	20%	25V
C428	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C501	1-124-584-00	ELECT	100uF	20%	10V (EXCEPT US, CND)
C502	1-124-584-00	ELECT	100uF	20%	10V (EXCEPT US, CND)
C4001	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C4002	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C6500	1-124-907-11	ELECT	10uF	20%	50V (US, CND)
C6500	1-124-261-00	ELECT	10uF	20%	50V (EXCEPT US, CND)
< CONNECTOR >					
CN601	1-573-101-11	SOCKET, CONNECTOR 9P			
CN602	1-580-783-11	CONNECTOR, BOARD TO BOARD			
CN603	1-573-101-11	SOCKET, CONNECTOR 9P			
CN604	1-580-783-11	CONNECTOR, BOARD TO BOARD			
*CN605	1-580-417-11	SOCKET, CONNECTOR 15P			
CN607	1-580-783-11	CONNECTOR, BOARD TO BOARD			
*CN609	1-568-858-11	SOCKET, CONNECTOR 15P			
< DIODE >					
D404	8-719-021-41	DIODE	UZM5.6X		
D405	8-719-021-77	DIODE	UZM8.2Z		(US, CND)
D407	8-719-801-78	DIODE	1SS184		
D408	8-719-210-33	DIODE	EC10DS2		
D409	8-719-210-33	DIODE	EC10DS2		
D416	8-719-801-78	DIODE	1SS184		

Ref.No.	Part No.	Description	Remark		
< IC >					
IC201	8-759-516-43	IC	CD4053BCM		
IC202	8-752-050-13	IC	CXA1101M		(US, CND)
IC202	8-752-037-90	IC	CXA1331M		(EXCEPT US, CND)
IC203	8-759-996-43	IC	RC4558PS		
IC204	8-759-516-47	IC	CD4066BCM		
IC205	8-752-055-61	IC	CXA1578P		
IC401	8-759-099-08	IC	M50964-260FP		
IC402	8-759-207-05	IC	TA7272P		
IC403	8-759-996-43	IC	RC4558PS		
IC405	8-759-520-90	IC	PST572E		
IC406	8-759-516-41	IC	CD4052BCM		
< COIL >					
L403	1-410-482-31	INDUCTOR	100uH		
L404	1-410-482-31	INDUCTOR	100uH		
< TRANSISTOR >					
Q201	8-729-207-56	TRANSISTOR	RN1402		
Q202	8-729-602-21	TRANSISTOR	2SC4154-F		
Q301	8-729-207-56	TRANSISTOR	RN1402		
Q302	8-729-602-21	TRANSISTOR	2SC4154-F		
Q401	8-729-804-41	TRANSISTOR	2SB1122-S		
Q402	8-729-804-41	TRANSISTOR	2SB1122-S		
Q403	8-729-207-68	TRANSISTOR	RN2402		
Q404	8-729-207-56	TRANSISTOR	RN1402		
Q405	8-729-207-68	TRANSISTOR	RN2402		
Q407	8-729-207-68	TRANSISTOR	RN2402		
Q408	8-729-207-56	TRANSISTOR	RN1402		
Q409	8-729-207-68	TRANSISTOR	RN2402		
Q410	8-729-232-72	TRANSISTOR	RN2404TE85L		(US, CND)
Q410	8-729-901-06	TRANSISTOR	DTA144E		(EXCEPT US, CND)
Q411	8-729-207-56	TRANSISTOR	RN1402		
Q412	8-729-207-68	TRANSISTOR	RN2402		
Q414	8-729-207-68	TRANSISTOR	RN2402		
Q415	8-729-207-68	TRANSISTOR	RN2402		
Q416	8-729-422-41	TRANSISTOR	XN1114		
Q417	8-729-422-41	TRANSISTOR	XN1114		
Q420	8-729-602-36	TRANSISTOR	2SA1602-F		
Q501	8-729-901-06	TRANSISTOR	DTA144EK		(EXCEPT US, CND)
Q2001	8-729-216-22	TRANSISTOR	2SA1162		
Q2001	8-729-602-36	TRANSISTOR	2SA1602		(EXCEPT US, CND)
Q2002	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
< RESISTOR >					
R108	1-216-082-00	METAL GLAZE	24K	5%	1/10W (EXCEPT US, CND)
R109	1-216-043-00	METAL CHIP	560	5%	1/10W (EXCEPT US, CND)

Ref.No.	Part No.	Description	Remark			
R110	1-216-082-00	METAL GLAZE	24K	5%	1/10W	(EXCEPT US,CND)
R201	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R202	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R203	1-216-056-00	METAL GLAZE	2K	5%	1/10W	
R204	1-216-060-00	METAL GLAZE	3K	5%	1/10W	
R205	1-216-105-00	METAL CHIP	220K	5%	1/10W	
R206	1-216-025-00	METAL CHIP	100	5%	1/10W	(US,CND)
R206	1-216-073-00	METAL CHIP	10K	5%	1/10W	(EXCEPT US,CND)
R207	1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	(US,CND)
R207	1-216-049-00	METAL CHIP	1K	5%	1/10W	(EXCEPT US,CND)
R208	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R209	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R210	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R211	1-216-025-00	METAL CHIP	100	5%	1/10W	
R212	1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	
R213	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R214	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R215	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	
R218	1-216-082-00	METAL GLAZE	24K	5%	1/10W	(EXCEPT US,CND)
R219	1-216-043-00	METAL CHIP	560	5%	1/10W	(EXCEPT US,CND)
R220	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R301	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R302	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R303	1-216-056-00	METAL GLAZE	2K	5%	1/10W	
R304	1-216-060-00	METAL GLAZE	3K	5%	1/10W	
R305	1-216-105-00	METAL CHIP	220K	5%	1/10W	
R306	1-216-025-00	METAL CHIP	100	5%	1/10W	(US,CND)
R306	1-216-073-00	METAL CHIP	10K	5%	1/10W	(EXCEPT US,CND)
R307	1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	(US,CND)
R307	1-216-049-00	METAL CHIP	1K	5%	1/10W	(EXCEPT US,CND)
R308	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R309	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R310	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R311	1-216-025-00	METAL CHIP	100	5%	1/10W	
R312	1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	
R313	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R314	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R315	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	
R320	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R401	1-216-037-00	METAL CHIP	330	5%	1/10W	
R402	1-216-037-00	METAL CHIP	330	5%	1/10W	
R403	1-216-037-00	METAL CHIP	330	5%	1/10W	
R404	1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	
R405	1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	
R406	1-216-113-00	METAL CHIP	470K	5%	1/10W	
R407	1-216-113-00	METAL CHIP	470K	5%	1/10W	
R408	1-216-073-00	METAL CHIP	10K	5%	1/10W	

Ref.No.	Part No.	Description	Remark			
R409	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R410	1-216-045-00	METAL CHIP	680	5%	1/10W	
R411	1-216-037-00	METAL CHIP	330	5%	1/10W	
R412	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R413	1-216-045-00	METAL CHIP	680	5%	1/10W	
R414	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R415	1-216-083-00	METAL CHIP	27K	5%	1/10W	
R416	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R417	1-216-083-00	METAL CHIP	27K	5%	1/10W	
R418	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R419	1-216-084-00	METAL CHIP	30K	5%	1/10W	
R420	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R421	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R422	1-216-090-00	METAL CHIP	51K	5%	1/10W	
R423	1-216-080-00	METAL CHIP	20K	5%	1/10W	
R424	1-216-090-00	METAL CHIP	51K	5%	1/10W	
R425	1-216-025-00	METAL CHIP	100	5%	1/10W	
R426	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R427	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R428	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R429	1-216-090-00	METAL CHIP	51K	5%	1/10W	
R430	1-216-084-00	METAL CHIP	30K	5%	1/10W	
R431	1-216-080-00	METAL CHIP	20K	5%	1/10W	
R432	1-216-090-00	METAL CHIP	51K	5%	1/10W	
R433	1-216-025-00	METAL CHIP	100	5%	1/10W	
R434	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R435	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R436	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R437	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R438	1-216-073-00	METAL CHIP	10K	5%	1/10W	(US,CND)
R440	1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	
R441	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R443	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R444	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R445	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R446	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R447	1-216-097-00	METAL CHIP	100K	5%	1/10W	(US,CND)
R447	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	(EXCEPT US,CND)
R448	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R449	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R450	1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	
R451	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R452	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R453	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R454	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R455	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R456	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R457	1-216-089-91	METAL GLAZE	47K	5%	1/10W	(US,CND)

# TC MAIN

# TC SW

Ref.No.	Part No.	Description	Remark
R458	1-216-088-00	METAL CHIP 43K 5% 1/10W (US,CND)	
R459	1-216-089-91	METAL GLAZE 47K 5% 1/10W (US,CND)	
R460	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R461	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R462	1-216-082-00	METAL GLAZE 24K 5% 1/10W	
R463	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R464	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R465	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R466	1-216-025-00	METAL CHIP 100 5% 1/10W	
R467	1-216-025-00	METAL CHIP 100 5% 1/10W	
R474	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R475	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R476	1-216-025-00	METAL CHIP 100 5% 1/10W	
R477	1-216-025-00	METAL CHIP 100 5% 1/10W	
R478	1-216-025-00	METAL CHIP 100 5% 1/10W	
R479	1-216-025-00	METAL CHIP 100 5% 1/10W	
R480	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R481	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R482	1-216-059-00	METAL CHIP 2.7K 5% 1/10W (US,CND)	
R482	1-216-063-00	METAL CHIP 3.9K 5% 1/10W (EXCEPT US,CND)	
R483	1-216-072-00	METAL CHIP 9.1K 5% 1/10W (US,CND)	
R483	1-216-073-00	METAL CHIP 10K 5% 1/10W (EXCEPT US,CND)	
R484	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R485	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R503	1-216-073-00	METAL CHIP 10K 5% 1/10W (EXCEPT US,CND)	
R504	1-216-083-00	METAL CHIP 27K 5% 1/10W (EXCEPT US,CND)	
R4000	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R4001	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R4002	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R4003	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R4004	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R4005	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R4006	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R4007	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R4008	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R4421	1-216-025-00	METAL CHIP 100 5% 1/10W	

## < VARIABLE RESISTOR >

RV201	1-241-136-11	RES, ADJ, CARBON 10K
RV301	1-241-136-11	RES, ADJ, CARBON 10K

## < TEST PIN >

*TP201	1-564-518-11	PLUG, CONNECTOR 3P
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## < VIBRATOR >

X401	1-567-819-11	VIBRATOR, CERAMIC (4MHz)
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Ref.No.	Part No.	Description	Remark
*	A-4365-232-A	TC SW BOARD, COMPLETE	(US,CND)
*	A-4365-220-A	TC SW BOARD, COMPLETE	(EXCEPT US,CND)
*****			
< DIODE >			
D351	8-719-310-24	LED SEL4525C-C (<)	
D352	8-719-310-24	LED SEL4525C-C (>)	
D353	8-719-312-37	LED SEL4225C-C (HIGH SPEED DUBBING)	
D355	8-719-312-37	LED SEL4225C-C (CD SYNCHRO)	
D356	8-719-310-04	LED SEL4925A-D (■ PAUSE)	
D357	8-719-310-24	LED SEL4525C-C (<)	
D358	8-719-310-24	LED SEL4525C-C (>)	
D359	8-719-312-37	LED SEL4225C-C (● REC)	
< RESISTOR >			
R351	1-216-029-00	METAL CHIP 150 5% 1/10W	
R352	1-216-033-00	METAL CHIP 220 5% 1/10W	
R353	1-216-037-00	METAL CHIP 330 5% 1/10W	
R354	1-216-041-00	METAL CHIP 470 5% 1/10W	
R355	1-216-045-00	METAL CHIP 680 5% 1/10W	
R356	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R357	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R359	1-216-029-00	METAL CHIP 150 5% 1/10W	
R360	1-216-033-00	METAL CHIP 220 5% 1/10W	
R361	1-216-037-00	METAL CHIP 330 5% 1/10W	
R362	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
R364	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R365	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R366	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R374	1-216-073-00	METAL CHIP 10K 5% 1/10W (US,CND)	
R381	1-216-065-00	METAL CHIP 4.7K 5% 1/10W (EXCEPT US,CND)	
R382	1-216-065-00	METAL CHIP 4.7K 5% 1/10W (EXCEPT US,CND)	
< SWITCH >			
S351	1-572-184-11	SWITCH, KEYBOARD (DECK A:□)	
S352	1-572-184-11	SWITCH, KEYBOARD (DECK A:▷)	
S353	1-572-184-11	SWITCH, KEYBOARD (DECK A:<)	
S354	1-572-184-11	SWITCH, KEYBOARD (DECK B:◁)	
S355	1-572-184-11	SWITCH, KEYBOARD (DECK B:▷)	
S356	1-572-184-11	SWITCH, KEYBOARD (DECK B:● REC)	
S357	1-572-184-11	SWITCH, KEYBOARD (HIGH SPEED DUBBING)	
S359	1-572-184-11	SWITCH, KEYBOARD (CD SYNCHRO)	
S360	1-572-184-11	SWITCH, KEYBOARD (DECK B:□)	
S361	1-572-184-11	SWITCH, KEYBOARD (■ PAUSE)	
S362	1-572-184-11	SWITCH, KEYBOARD (DECK B:▷)	
S363	1-572-184-11	SWITCH, KEYBOARD (DECK B:<)	
S364	1-572-184-11	SWITCH, KEYBOARD (DECK A:◁)	
S365	1-572-184-11	SWITCH, KEYBOARD (DECK A:▷)	
S371	1-692-503-11	SWITCH, SLIDE (DIRECTION)	

Ref.No.	Part No.	Description	Remark
S372	1-692-356-11	SWITCH, SLIDE (DOLBY NR)	(US,CND)
S372	1-692-503-11	SWITCH, SLIDE (DOLBY NR)	(EXCEPT US,CND)
*****			
*	1-649-257-11	TRANSFORMER BOARD	*****
< IC LINK >			
△ICP111	1-532-836-21	LINK, IC PRF500 0.5A	(EXCEPT US,CND)
< FUSE >			
△F111	1-532-773-21	FUSE, MICRO (SECONDARY) (0.5A/125V)	(US,CND)
△F911	1-532-743-11	FUSE, GLASS TUBE (2A/125V)	(US,CND)
△F911	1-532-203-00	FUSE (2A/125V)	(EXCEPT US,CND)
△F912	1-532-743-11	FUSE, GLASS TUBE (2A/125V)	(US,CND)
△F912	1-532-203-00	FUSE (2A/125V)	(EXCEPT US,CND)
< CONNECTOR >			
CN961	1-690-123-21	REED (WITH CONNECTOR) (2 CORE)	(US,CND, AEP, UK, G, IT)
*****			
MISCELLANEOUS			
*****			
1	1-751-686-11	WIRE (FLAT TYPE) (5 CORE)	
8	1-751-689-11	WIRE (FLAT TYPE) (15 CORE)	
65	1-696-746-11	WIRE (FLAT TYPE) (15 CORE)	
67	1-751-690-11	WIRE (FLAT TYPE) (21 CORE)	
71	1-590-577-11	WIRE, FLAT TYPE (17 CORE)	
72	1-751-686-11	WIRE (FLAT TYPE) (5 CORE)	
115	1-590-902-11	WIRE, FLAT TYPE (9 CORE)	
167	1-638-983-11	PC BOARD, MOTOR FLEXIBLE	
HP101	A-2003-837-F	DECK ASSY, HEAD (DECK A)	
HRP101	A-2003-838-F	DECK ASSY, HEAD (DECK B) (including HE101)	
IC81A	8-719-710-03	PHOTO REFLECTOR NJL5165K-B (DECK A)	
IC81B	8-719-710-03	PHOTO REFLECTOR NJL5165K-B (DECK B)	
M101	1-698-173-11	MOTOR, FAN (DC)	
M1A	X-3365-377-1	MOTOR ASSY (CAPSTAN) (DECK A)	
M1B	X-3365-377-1	MOTOR ASSY (CAPSTAN) (DECK B)	
M2A	X-3363-501-1	MOTOR ASSY (REEL) (DECK A)	
M2B	X-3363-501-1	MOTOR ASSY (REEL) (DECK B)	
RV601	1-223-487-11	RES, VAR, CARBON (WITH MOTOR) (VOLUME)	
△T901	1-423-776-11	TRANSFORMER, POWER (E, EA, SP, AUS, JE)	
△T901	1-423-777-11	TRANSFORMER, POWER (UK)	
△T901	1-423-778-11	TRANSFORMER, POWER (AEP, G, IT)	
△T901	1-423-779-11	TRANSFORMER, POWER (US,CND)	
*****			

Ref.No.	Part No.	Description	Remark
ACCESSORIES & PACKING MATERIALS			
*****			
	3-703-710-41	STICKER, SONY SYMBOL (12)	
*	4-950-766-01	LABEL, FCC DIGITAL DEVICE (US)	*****
*****			
HARDWARE LIST			
*****			
#1	7-682-547-09	SCREW +BVTT 3X6 (S)	
#2	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
#3	7-685-645-79	SCREW +BTP 3X6 TYPE2 N-S	
#4	7-682-548-04	SCREW +BVTT 3X8 (S)	
#5	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#6	7-621-770-67	SCREW +PTT 2.6X6 (S)	
#7	7-627-556-08	SCREW +P 2.6X2.8	
#8	7-621-775-00	SCREW +B 2.6X3	

The components identified by  
mark △ or dotted line with mark  
△ are critical for safety.  
Replace only with part number  
specified.

Les composants identifiés par une  
marque △ sont critiques pour  
la sécurité.  
Ne les remplacer que par une pièce  
portant le numéro spécifié.



# DXA-C70

## SONY<sup>®</sup> SERVICE MANUAL

*US Model  
Canadian Model  
AEP Model  
UK Model  
E Model  
Australian Model  
Tourist Model*

### SUPPLEMENT-1

File this Supplement with the Service Manual.

**Subject: SERVICE PARTS CHANGED**

\* Please be advised that you have to use the new type parts when you change F101, F102 or F103 parts.

#### • SECTION 7. ELECTRICAL PARTS LIST (POWER Board) (Service Manual Page 56.)

Ref. No.	Former Parts	New Parts	
	Description	Part No.	Description
△F101	FUSE (T1.6AL/250V) (AEP, UK, G, IT)	1-532-285-00	FUSE (T1.25AL/250V) (AEP, UK, G, IT)
△F102	FUSE (T3.15AL/250V) (E, EA, SP, AUS, JE)	1-532-237-00	FUSE (T3.15AL/250V) (E, EA, AUS, JE)
		1-532-286-00	FUSE (T2.5AL/250V) (SP)
△F103	FUSE (T1.6AL/125V) (E, EA, SP, AUS, JE)	1-532-259-00	FUSE (T1.6AL/250V) (E, EA, AUS, JE)
		1-532-285-00	FUSE (T1.25AL/250V) (SP)

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

#### ● Abbreviations

AUS: Australian	IT: Italian
EA: Saudi Arabia	JE: Tourist
G: German	SP: Singapore

# DXA-C70

## SONY<sup>®</sup> SERVICE MANUAL

### SUPPLEMENT-2

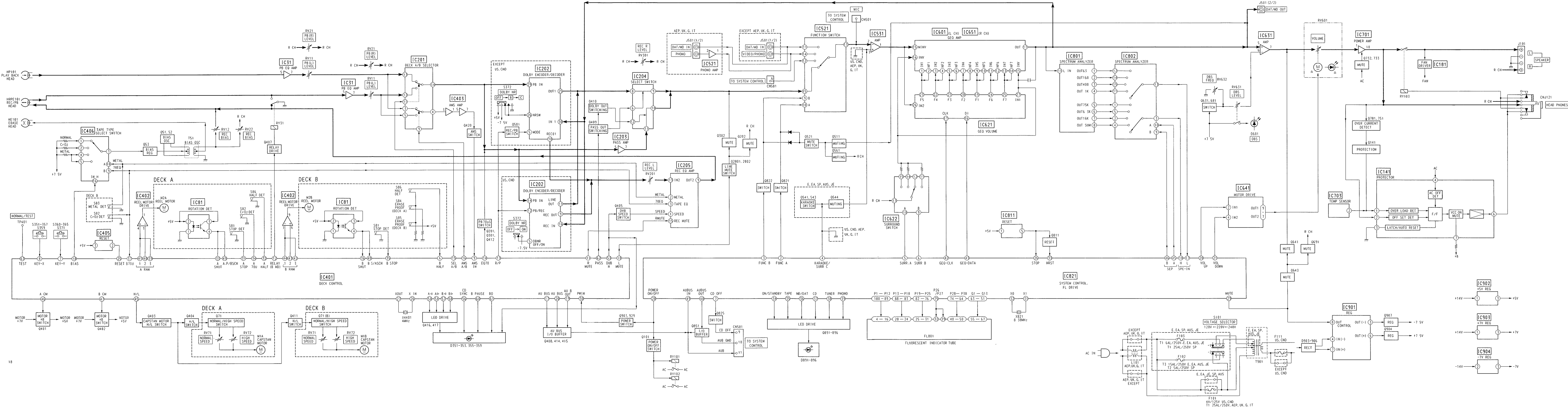
File this supplement with the service manual.

BLOCK DIAGRAM

*US Model*  
*Canadian Model*  
*AEP Model*  
*UK Model*  
*E Model*  
*Australian Model*  
*Tourist Model*

• BLOCK DIAGRAM

- Abbreviations
- AUS: Australian
- EA: Saudi Arabia
- G: German
- IT: Italian
- JE: Tourist
- SP: Singapore





# DXA-C70

**SONY®**

## SERVICE MANUAL

*US Model  
Canadian Model  
AEP Model  
UK Model  
E Model  
Australian Model  
Tourist Model*

### SUPPLEMENT-3

File this supplement with the service manual.

**Subject : 1. CORRECTION  
2. PARTS SUPPLY CLASSIFICATION CHANGED  
3. PARTS CHANGED  
4. CHANGE OF MECHANISM DECK (DECK B)  
5. MD (BX) BOARD AND LEAF SW (B)  
BOARD CHANGE**

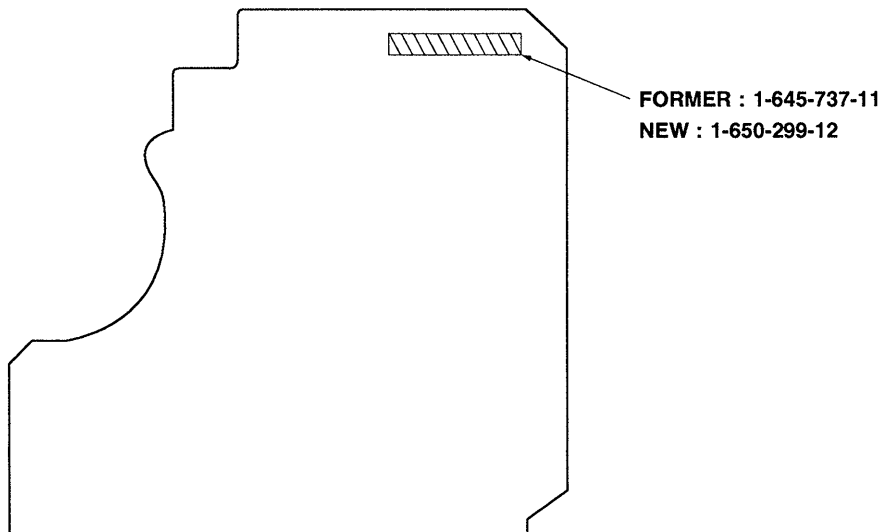
(ECN-TA401769)

- The mechanism deck (Deck B) has been changed from TCM-190RB22A to TCM-190RB52A.  
The MD (BX) board and LEAF SW (B) board have been changed according to the change of the mechanism deck. Refer to "How to distinguish".

#### **How to distinguish :**


**[MD (BX) BOARD]**

**[Component Side] (DECK B)**



## 1. CORRECTION

- Correct your service manual as shown below.

 : indicates corrected portion.

Page	INCORRECT				CORRECT			
	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
47	*** EXPLODED VIEWS ***				*** EXPLODED VIEWS ***			
	IC81A	8-719-710-03	PHOTO REFLECTOR NJL5165K-B (DECK A)		IC81A	<u>8-749-924-10</u>	PHOTO REFLECTOR NJL5165K-B (H1)	(DECK A)
	IC81B	8-719-710-03	PHOTO REFLECTOR NJL5165K-B (DECK B)		IC81B	<u>8-749-924-10</u>	PHOTO REFLECTOR NJL5165K-B (H1)	(DECK B)
48	* 202	3-359-425-01	SLIDER (REVERSE SLIDER)		202	3-359-425-01	SLIDER (REVERSE SLIDER)	
	* 206	3-359-427-01	SLIDER (LEVERSE SLIDER)		206	3-359-427-01	SLIDER (REVERSE SLIDER)	
63	*** MISCELLANEOUS ***				*** MISCELLANEOUS ***			
	IC81A	8-719-710-03	PHOTO REFLECTOR NJL5165K-B (DECK A)		IC81A	<u>8-749-924-10</u>	PHOTO REFLECTOR NJL5165K-B (H1)	(DECK A)
	IC81B	8-719-710-03	PHOTO REFLECTOR NJL5165K-B (DECK B)		IC81B	<u>8-749-924-03</u>	PHOTO REFLECTOR NJL5165K-B (H1)	(DECK B)
	*** HARDWARE LIST ***				*** HARDWARE LIST ***			
	#1	7-682-547-09	SCREW +BVTT 3x6 (S)		#1	<u>7-685-871-01</u>	SCREW +BVTT 3x6 (S)	

## 2. PARTS SUPPLY CLASSIFICATION CHANGE

Revise your service manual as shown below due to parts supply classification has been changed.

Page	CURRENT				REVISED			
	Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
51	*** ELECTRICAL PARTS LIST *** *** MAIN BOARD ***				*** ELECTRICAL PARTS LIST *** *** MAIN BOARD ***			
	△F951	1-532-741-11	FUSE, GLASS TUBE (1.25A/125V) (US, CND)		△F951	1-533-417-11	FUSE, GLASS CYLINDRICAL (DIA. 5) (1.25A/125V) (US, CND)	
	△F951	1-532-285-00	FUSE (1.25A/250V) (EXCEPT US, CND)		△F951	1-532-502-51	FUSE, TIME-LAG (1.25A/250V) (EXCEPT US, CND)	
	△F952	1-532-741-11	FUSE, GLASS TUBE (1.25A/125V) (US, CND)		△F952	1-533-417-11	FUSE, GLASS CYLINDRICAL (DIA. 5) (1.25A/125V) (US, CND)	
	△F952	1-532-285-00	FUSE (1.25A/250V) (EXCEPT US, CND)		△F952	1-532-502-51	FUSE, TIME-LAG (1.25A/250V) (EXCEPT US, CND)	
56	*** POWER BOARD ***				*** POWER BOARD ***			
	△F101	1-532-746-11	FUSE, GLASS TUBE (4A/125V) (US, CND)		△F101	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA. 5) (4A/125V) (US, CND)	
	△F101	1-532-285-00	FUSE (T1.25AL/250V) (AEP, UK, G, IT)		△F101	1-532-502-51	FUSE, TIME-LAG (1.25A/250V) (AEP, UK, G, IT)	
	△F102	1-532-237-00	FUSE (T3.15AL/250V) (E, EA, AUS, JE)		△F102	1-532-465-51	FUSE, TIME-LAG (3.15A/250V) (E, EA, AUS, JE)	
	△F102	1-532-286-00	FUSE (T2.5AL/250V) (SP)		△F102	1-532-464-51	FUSE, TIME-LAG (2.5A/250V) (SP)	
	△F103	1-532-259-00	FUSE (T1.6AL/250V) (E, EA, AUS, JE)		△F103	1-532-503-51	FUSE, TIME-LAG (1.6A/250V) (E, EA, AUS, JE)	
	△F103	1-532-285-00	FUSE (T1.25AL/250V) (SP)		△F103	1-532-502-51	FUSE, TIME-LAG (1.25A/250V) (SP)	
57	△R107	1-219-136-11	FUSIBLE 0.22 5% 1/4W F		△R107	1-219-121-11	FUSIBLE 0.22 5% 1/4W F	
	△R108	1-219-136-11	FUSIBLE 0.22 5% 1/4W F		△R108	1-219-121-11	FUSIBLE 0.22 5% 1/4W F	
63	*** TRANSFORMER BOARD ***				*** TRANSFORMER BOARD ***			
	△F911	1-532-743-11	FUSE, GLASS TUBE (2A/125V) (US, CND)		△F911	1-533-296-11	FUSE, GLASS CYLINDRICAL (DIA. 5) (2A/125V) (US, CND)	
	△F911	1-532-203-00	FUSE (2A/125V) (EXCEPT US, CND)		△F911	1-532-388-51	FUSE, TIME-LAG (2A/250V) (EXCEPT US, CND)	
	△F912	1-532-743-11	FUSE, GLASS TUBE (2A/125V) (US, CND)		△F912	1-533-296-11	FUSE, GLASS CYLINDRICAL (DIA. 5) (2A/125V) (US, CND)	
	△F912	1-532-203-00	FUSE (2A/125V) (EXCEPT US, CND)		△F912	1-532-388-51	FUSE, TIME-LAG (2A/250V) (EXCEPT US, CND)	


### • Abbreviation

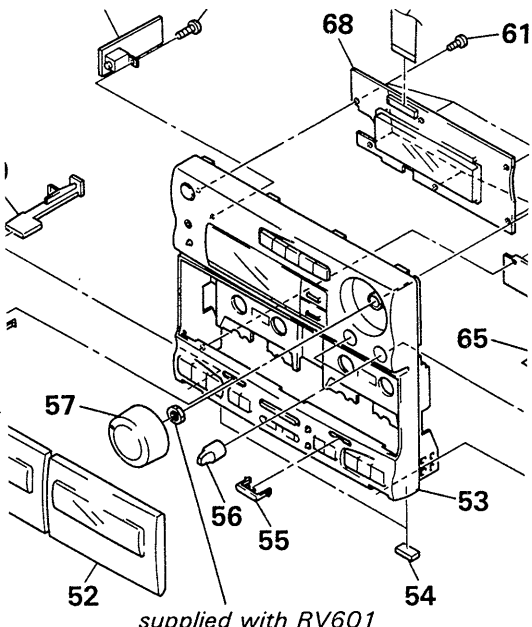
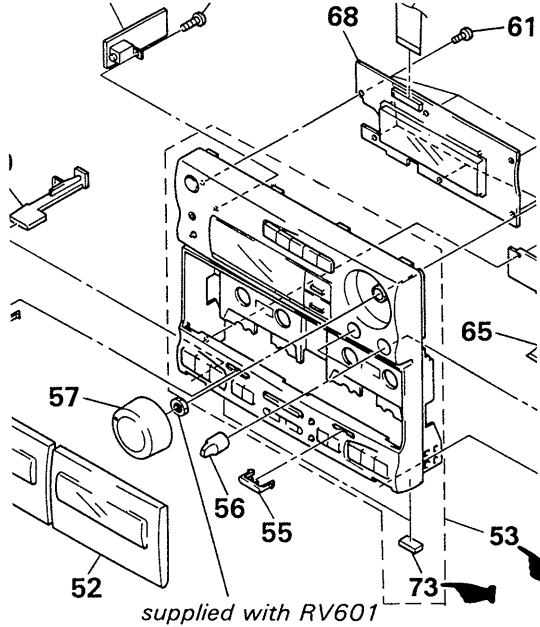
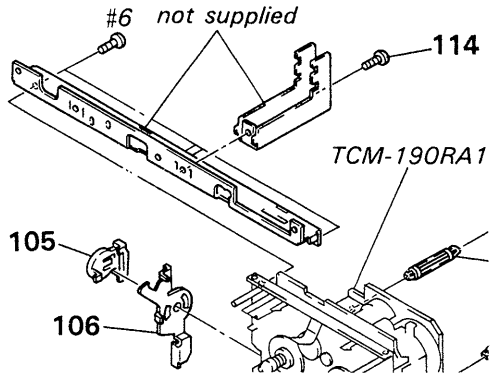
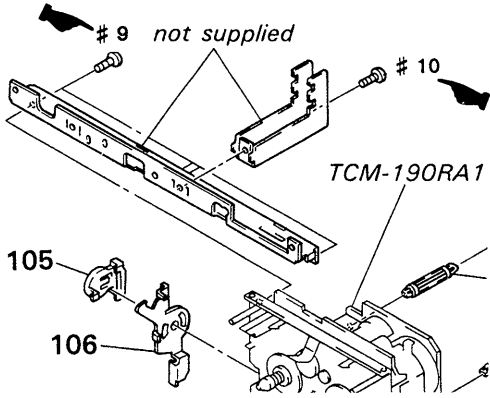
CND : Canadian model  
G : German model  
IT : Italian model  
EA : Saudi Arabia model  
AUS : Australian model  
SP : Singapore model  
JE : Tourist model

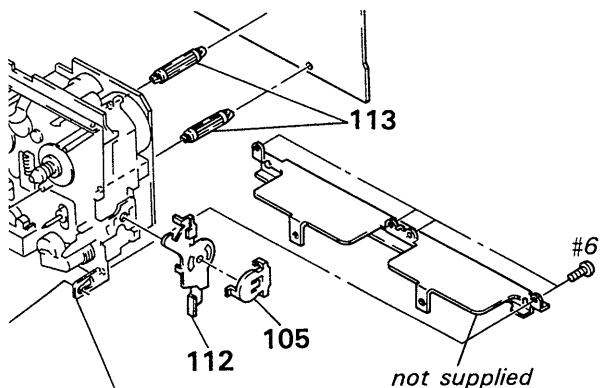
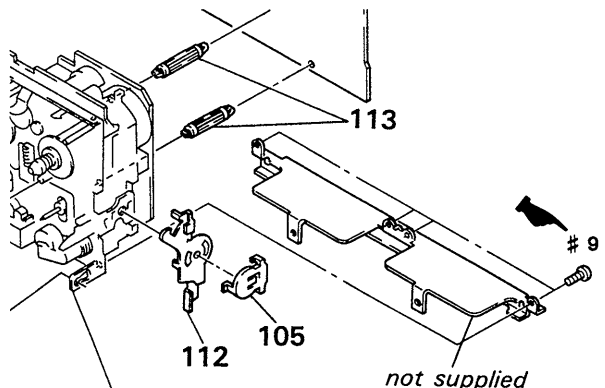
The components identified by mark △ or dotted line with mark △ are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

3. PARTS CHANGED


 : indicates changed portion.

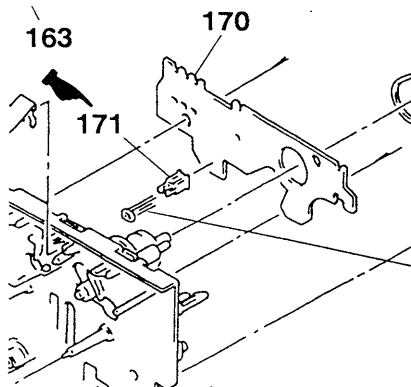
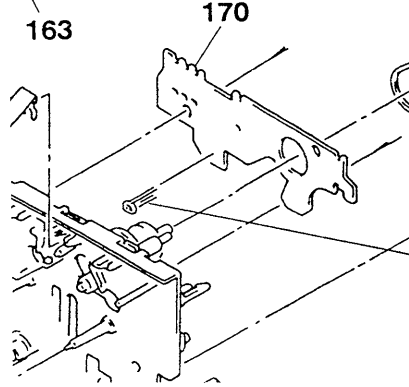
Page	FORMER				NEW			
	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	*** EXPLODED VIEWS ***				*** EXPLODED VIEWS ***			
44	* 2	A-4365-234-A	POWER BOARD, COMPLETE (US, Canadian)		* 2	A-4369-132-A	POWER BOARD, COMPLETE (US, Canadian)	
	* 7	A-4365-224-A	MAIN BOARD, COMPLETE (US, Canadian)		* 7	A-4369-131-A	MAIN BOARD, COMPLETE (US, Canadian)	
45	65	1-696-746-11	WIRE (FLAT TYPE) (15 CORE)		65	1-751-716-11	WIRE (FLAT TYPE) (15 CORE)	
					73	4-930-336-21	FOOT (FELT)	
								
46	108	3-354-955-01	LEVER (EJ SAFTY LEVER L)		108	3-926-195-01	LEVER (EJ-L)	
	110	3-354-956-01	LEVER (EJ SAFTY LEVER R)		110	3-926-196-01	LEVER (EJ-R)	
	114	4-951-620-01	SCREW (2.6x8), +BVTP					
								

Page	FORMER				NEW			
	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
46								
								

## 4. CHANGE OF MECHANISM DECK

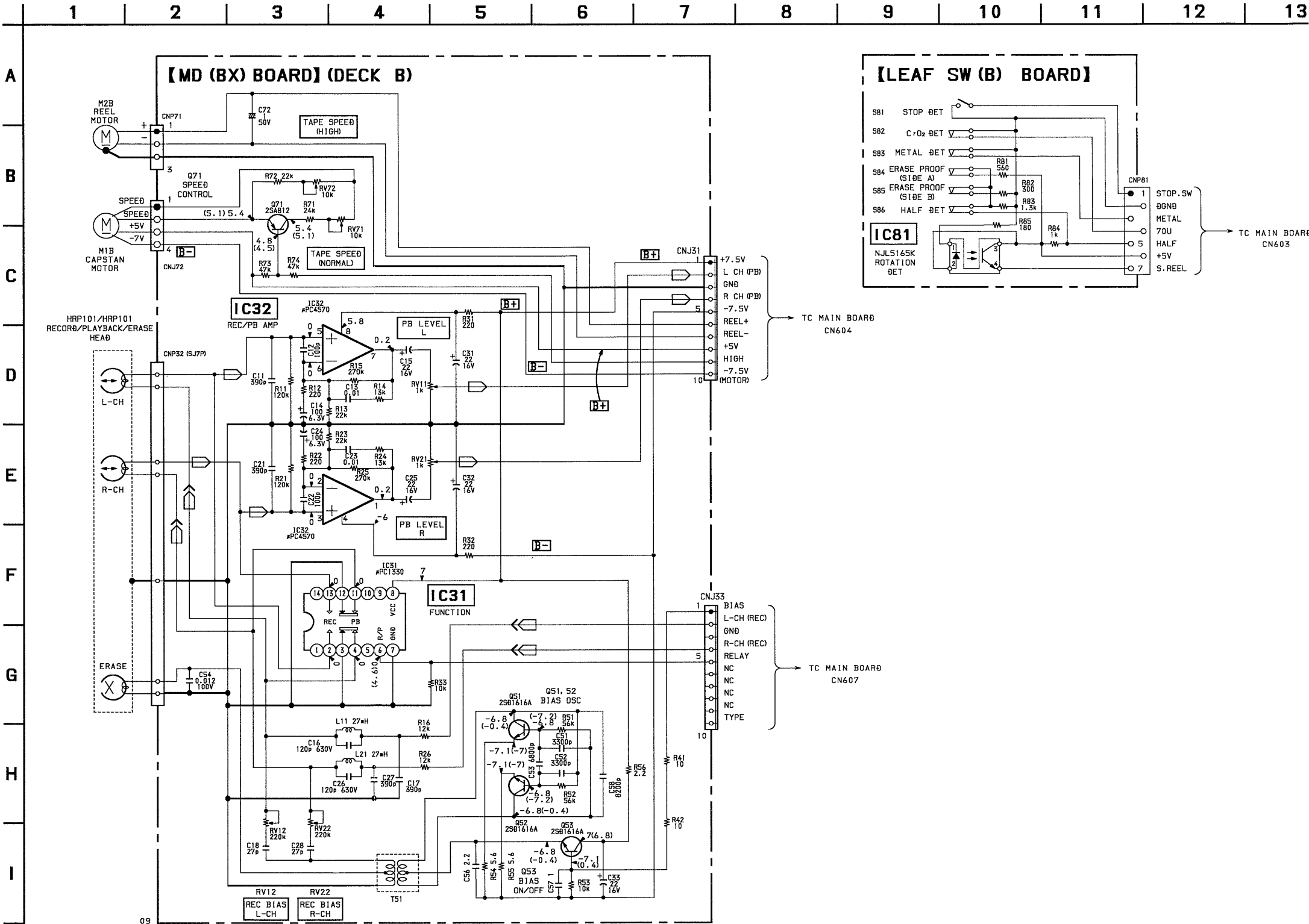
- The mechanism deck (B deck) has been changed from TCM-190RB22A to TCM-190RB52A.

 : indicates changed portion.

Page	FORMER				NEW			
	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	*** EXPLODED VIEWS ***				*** EXPLODED VIEWS ***			
46	115	1-590-902-11	WIRE, FLAT TYPE (9 CORE)		115	1-765-404-11	WIRE (FLAT TYPE) (7 CORE)	
47	151	X-3359-408-1	LEVER (PINCH LEVER FWD) ASSY		151	X-3359-408-1	LEVER (PINCH LEVER FWD) ASSY (DECK A)	
	152	3-359-455-01	SPRING, TORSION		151	X-3366-047-1	LEVER (PINCH F) ASSY (DECK B)	
	155	X-3359-409-1	LEVER (PINCH LEVER REV) ASSY		152	3-359-455-01	SPRING, TORSION (DECK A)	
					152	3-907-362-01	SPRING, TORSION (DECK B)	
	157	X-3362-078-1	TABLE ASSY (B), REEL		155	X-3359-409-1	LEVER (PINCH LEVER REV) ASSY (DECK A)	
	160	X-3359-406-1	FLYWHEEL (FWD) ASSY		155	X-3366-048-1	LEVER (PINCH R) ASSY (DECK B)	
					157	X-3362-078-1	TABLE ASSY (B), REEL (DECK A)	
	161	X-3359-410-1	FLYWHEEL (REV) ASSY		157	X-3366-971-1	TABLE ASSY (B), REEL (DECK B)	
* 164	3-359-436-01	BASE (THRUST RETAINER), FITTING			160	X-3359-406-1	FLYWHEEL (FWD) ASSY (DECK A)	
					160	X-3367-629-1	FLYWHEEL (FWD) ASSY (DECK B)	
* 168	A-2006-400-A	MD (BX) BOARD, COMPLETE (DECK B)			161	X-3359-410-1	FLYWHEEL (REV) ASSY (DECK A)	
* 170	1-634-841-14	LEAF SW (B) BOARD (DECK B)			161	X-3367-630-1	FLYWHEEL (REV) ASSY (DECK B)	
171	3-343-419-01	HOLDER (S SENSER A)			* 164	3-359-436-01	BASE (THRUST RETAINER), FITTING (DECK A)	
					164	3-359-436-01	BASE (THRUST RETAINER), FITTING (DECK B)	
					* 168	A-2007-133-A	MD-B (ICD) BOARD, COMPLETE (DECK B)	
					* 170	1-638-020-11	LEAF SW (B) BOARD (DECK B)	
							not used	
								
172	X-3359-404-1	TABLE ASSY, REEL			172	X-3359-404-1	TABLE ASSY, REEL (DECK A)	
HRP101	A-2003-838-F	DECK ASSY, HEAD (DECK B)	(including HE101)		172	X-3366-970-1	TABLE ASSY, REEL (DECK B)	
					HRP101	A-2004-527-A	DECK ASSY, HEAD (DECK B)	(including HE101)

Page	FORMER				NEW			
	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
48	* 204	3-359-415-01	SLIDER (TRIGGER SLIDER)		* 204	3-359-415-01	SLIDER (TRIGGER SLIDER) (DECK A)	
	209	3-359-429-01	SLIDER (BRAKE PLATE)		204	3-359-415-11	SLIDER (TRIGGER SLIDER) (DECK B)	
	211	X-3359-405-1	LEVER (FR ARM) ASSY		209	3-359-429-01	SLIDER (BRAKE PLATE) (DECK A)	
					209	3-359-429-11	SLIDER (BRAKE PLATE) (DECK B)	
	212	3-359-453-01	SPRING (FR ARM), TORSION		211	X-3359-405-1	LEVER (FR ARM) ASSY (DECK A)	
	213	3-359-419-01	GEAR (FR GEAR)		211	X-3366-569-1	ARM ASSY, FR (DECK B)	
60					212	3-359-453-01	SPRING (FR ARM), TORSION (DECK A)	
					212	3-924-185-01	SPRING (FR ARM), TORSION (DECK B)	
					213	3-359-419-01	GEAR (FR GEAR) (DECK A)	
					213	3-359-419-11	GEAR (FR GEAR) (DECK B)	
63								
60	*** ELECTRICAL PARTS LIST ***				*** ELECTRICAL PARTS LIST ***			
	*** TC MAIN BOARD ***				*** TC MAIN BOARD ***			
	CN601	1-573-101-11	SOCKET, CONNECTOR 9P		CN601	1-750-585-11	SOCKET, CONNECTOR 7P	
	CN603	1-573-101-11	SOCKET, CONNECTOR 9P		CN603	1-750-585-11	SOCKET, CONNECTOR 7P	
63	*** MISCELLANEOUS ***				*** MISCELLANEOUS ***			
	65	1-696-746-11	WIRE (FLAT TYPE) (15 CORE)		65	1-751-716-11	WIRE (FLAT TYPE) (15 CORE)	
	115	1-590-902-11	WIRE FLAT TYPE (9 CORE)		115	1-765-404-11	WIRE (FLAT TYPE) (7 CORE)	
	HRP101	A-2003-838-F	DECK ASSY, HEAD (DECK B)		HRP101	A-2004-527-A	DECK ASSY, HEAD (DECK B)	
			(including HE101)				(including HE101)	
63	*** ACCESSORIES & PACKING MATERIALS ***				*** ACCESSORIES & PACKING MATERIALS ***			
	*	4-950-766-01	LABEL, FCC DIGITAL DEVICE (US)		not used			
63	*** HARDWARE LIST ***				*** HARDWARE LIST ***			
					#9	7-685-862-09	SCREW +BVT 2.6x6 (S)	
					#10	7-685-133-19	SCREW +P 2.6x6 TYPE2	

5. MD (BX) BOARD AND LEAF SW (B) BOARD  
SCHEMATIC DIAGRAM



NOTE

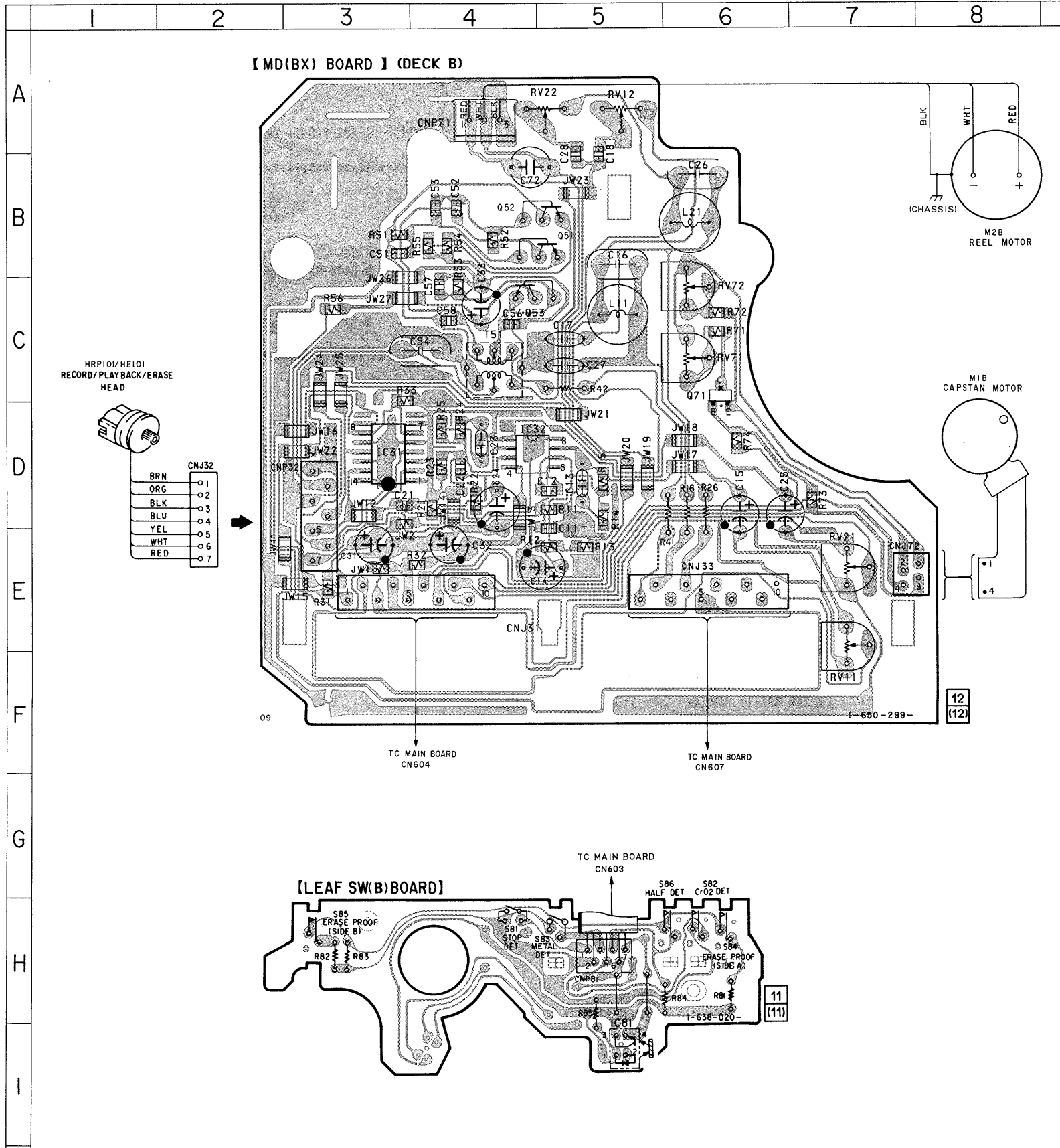
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}:\mu\text{F}$   
50WV or less are not indicated except for electrolytics  
and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise  
specified.
- **B+** :B+ Line.
- **B-** :B- Line.
- :adjustment for repair.

- Voltages are dc with respect to ground under no-signal  
conditions.  
no mark: PLAY  
( ): REC
- Voltages are taken with a VOM (Input impedance  $10\text{M}\Omega$ ).  
Voltage variations may be noted due to normal produc-  
tion tolerances.

- Signal path.
- :PB ( DECK A )
- :PB ( DECK B )
- :REC ( DECK B )



PRINTED WIRING BOARD



• Semiconductor Location

Ref. No.	Location
IC31	D-3
IC32	D-4
Q51	B-5
Q52	B-4
Q53	C-4
Q71	C-6

Note:

- — : parts extracted from the component side.
- : Pattern from the side which enable seeing.

# LEAF SW (B) MD (BX) ELECTRICAL PARTS LIST

## NOTE:

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS  
All resistors are in ohms  
METAL: Metal-film resistor  
METAL OXIDE: Metal Oxide-film resistor  
F : nonflammable

- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA...:  $\mu$  A..., uPA...:  $\mu$  PA..., uPB...:  $\mu$  PB...,  
uPC...:  $\mu$  PC..., uPD...:  $\mu$  PD...
- CAPACITORS  
uF :  $\mu$  F
- COILS  
uH :  $\mu$  H

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	1-638-020-11	LEAF SW (B) BOARD *****		C26	1-136-434-11	FILM 120PF 5% 630V	
		< CONNECTOR >		C27	1-102-113-00	CERAMIC 390PF 10% 50V	
* CNP81	1-568-850-11	SOCKET, CONNECTOR 7P		C28	1-163-237-11	CERAMIC CHIP 27PF 5% 50V	
		< IC >		C31	1-124-234-00	ELECT 22uF 20% 16V	
IC81	8-749-924-10	IC PHONT REFLECTOR NJL5165K-B(H1)		C32	1-124-234-00	ELECT 22uF 20% 16V	
		< RESISTOR >		C33	1-124-234-00	ELECT 22uF 20% 16V	
R81	1-249-414-11	CARBON 560 5% 1/4W		C51	1-164-182-11	CERAMIC CHIP 0.0033uF 10% 50V	
R82	1-247-818-11	CARBON 300 5% 1/4W		C52	1-164-182-11	CERAMIC CHIP 0.0033uF 10% 50V	
R83	1-247-834-11	CARBON 1.3K 5% 1/4W		C53	1-163-019-00	CERAMIC CHIP 0.0068uF 10% 50V	
R84	1-249-417-11	CARBON 1K 5% 1/4W		C54	1-107-364-11	FILM 0.012uF 5% 100V	
R85	1-249-408-11	CARBON 180 5% 1/4W		C56	1-164-505-11	CERAMIC CHIP 2.2uF 16V	
		< SWITCH >		C57	1-164-346-11	CERAMIC CHIP 1uF 16V	
S81	1-571-958-11	SWITCH, PUSH (1 KEY) (STOP DET)		C58	1-163-020-00	CERAMIC CHIP 0.0082uF 10% 50V	
S82	1-571-281-21	SWITCH, LEAF (CrO <sub>2</sub> DET)		C72	1-109-889-11	ELECT 1uF 20% 50V	
S83	1-571-281-21	SWITCH, LEAF (METAL DET)				< CONNECTOR >	
S84	1-571-281-21	SWITCH, LEAF (ERASE PROOF (A))		* CNJ31	1-580-782-11	CONNECTOR, BOARD TO BOARD	
S85	1-571-281-21	SWITCH, LEAF (ERASE PROOF (B))		* CNJ33	1-580-782-11	CONNECTOR, BOARD TO BOARD	
S86	1-571-281-21	SWITCH, LEAF (HALF DET)		CNJ72	1-764-902-11	CONNECTOR, FFC/FPC 4P	
		*****		* CNP32	1-580-781-11	PIN, CONNECTOR (PC BOARD) 7P	
				* CNP71	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P	
						< IC >	
*	A-2007-133-A	MD (BX) BOARD, COMPLETE *****		IC31	8-759-249-21	IC uPC1330AGR	
		< CAPACITOR >		IC32	8-759-106-02	IC uPC4570G2	
						< JUMPER RESISTOR >	
C11	1-163-131-00	CERAMIC CHIP 390PF 5% 50V		JW1	1-216-295-91	CONDUCTOR, CHIP (2012)	
C12	1-163-251-11	CERAMIC CHIP 100PF 5% 50V		JW2	1-216-295-91	CONDUCTOR, CHIP (2012)	
C13	1-136-153-00	FILM 0.01uF 5% 50V		JW11	1-216-296-91	CONDUCTOR, CHIP (3216)	
C14	1-126-177-11	ELECT 100uF 20% 10V		JW12	1-216-296-91	CONDUCTOR, CHIP (3216)	
C15	1-124-234-00	ELECT 22uF 20% 16V		JW13	1-216-296-91	CONDUCTOR, CHIP (3216)	
C16	1-136-434-11	FILM 120PF 5% 630V		JW14	1-216-296-91	CONDUCTOR, CHIP (3216)	
C17	1-102-113-00	CERAMIC 390PF 10% 50V		JW15	1-216-296-91	CONDUCTOR, CHIP (3216)	
C18	1-163-237-11	CERAMIC CHIP 27PF 5% 50V		JW16	1-216-296-91	CONDUCTOR, CHIP (3216)	
C21	1-163-131-00	CERAMIC CHIP 390PF 5% 50V		JW17	1-216-296-91	CONDUCTOR, CHIP (3216)	
C22	1-163-251-11	CERAMIC CHIP 100PF 5% 50V		JW18	1-216-296-91	CONDUCTOR, CHIP (3216)	
C23	1-136-153-00	FILM 0.01uF 5% 50V		JW19	1-216-296-91	CONDUCTOR, CHIP (3216)	
C24	1-126-177-11	ELECT 100uF 20% 10V		JW20	1-216-296-91	CONDUCTOR, CHIP (3216)	
C25	1-124-234-00	ELECT 22uF 20% 16V		JW21	1-216-296-91	CONDUCTOR, CHIP (3216)	
				JW22	1-216-296-91	CONDUCTOR, CHIP (3216)	
				JW23	1-216-296-91	CONDUCTOR, CHIP (3216)	

MD (BX)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
JW24	1-216-296-91	CONDUCTOR, CHIP	(3216)	RV72	1-241-630-11	RES, ADJ, CARBON 10K	
JW25	1-216-296-91	CONDUCTOR, CHIP	(3216)			< TRANSFORMER >	
JW26	1-216-296-91	CONDUCTOR, CHIP	(3216)				
JW27	1-216-296-91	CONDUCTOR, CHIP	(3216)	T51	1-429-290-11	TRANSFORMER, BIAS OSCILLATION	
		< COIL >				*****	
L11	1-410-780-11	INDUCTOR	27mH			MISCELLANEOUS	
L21	1-410-780-11	INDUCTOR	27mH			*****	
		< TRANSISTOR >		115	1-765-404-11	WIRE (FLAT TYPE) (7 CORE)	
Q51	8-729-111-29	TRANSISTOR	2SD1616A-K	HRP101	A-2004-527-A	DECK ASSY, HEAD (DECK B)	
Q52	8-729-111-29	TRANSISTOR	2SD1616A-K			(including HE101)	
Q53	8-729-111-29	TRANSISTOR	2SD1616A-K	M1B	X-3365-377-2	MOTOR ASSY (CAPSTAN) (DECK B)	
Q71	8-729-216-22	TRANSISTOR	2SA1162-G	M2B	X-3363-501-1	MOTOR ASSY (REEL) (DECK B)	
		< RESISTOR >				*****	
R11	1-216-099-00	METAL CHIP	120K 5% 1/10W				
R12	1-216-033-00	METAL CHIP	220 5% 1/10W				
R13	1-216-081-00	METAL CHIP	22K 5% 1/10W				
R14	1-216-076-00	METAL CHIP	13K 5% 1/10W				
R15	1-216-107-00	METAL CHIP	270K 5% 1/10W				
R16	1-249-430-11	CARBON	12K 5% 1/4W				
R21	1-216-099-00	METAL CHIP	120K 5% 1/10W				
R22	1-216-033-00	METAL CHIP	220 5% 1/10W				
R23	1-216-081-00	METAL CHIP	22K 5% 1/10W				
R24	1-216-076-00	METAL CHIP	13K 5% 1/10W				
R25	1-216-107-00	METAL CHIP	270K 5% 1/10W				
R26	1-249-430-11	CARBON	12K 5% 1/4W				
R31	1-216-033-00	METAL CHIP	220 5% 1/10W				
R32	1-216-033-00	METAL CHIP	220 5% 1/10W				
R33	1-216-073-00	METAL CHIP	10K 5% 1/10W				
R41	1-249-393-11	CARBON	10 5% 1/4W				
R42	1-249-393-11	CARBON	10 5% 1/4W				
R51	1-216-091-00	METAL CHIP	56K 5% 1/10W				
R52	1-216-091-00	METAL CHIP	56K 5% 1/10W				
R53	1-216-073-00	METAL CHIP	10K 5% 1/10W				
R54	1-216-309-00	METAL CHIP	5.6 5% 1/10W				
R55	1-216-309-00	METAL CHIP	5.6 5% 1/10W				
R56	1-216-298-00	METAL CHIP	2.2 5% 1/10W				
R71	1-216-082-00	METAL GLAZE	24K 5% 1/10W				
R72	1-216-081-00	METAL CHIP	22K 5% 1/10W				
R73	1-216-089-91	METAL GLAZE	47K 5% 1/10W				
R74	1-216-089-91	METAL GLAZE	47K 5% 1/10W				
		< VARIABLE RESISTOR >					
RV11	1-241-761-11	RES, ADJ, CARBON 1K					
RV12	1-238-551-11	RES, ADJ, CARBON 220K					
RV21	1-241-761-11	RES, ADJ, CARBON 1K					
RV22	1-238-551-11	RES, ADJ, CARBON 220K					
RV71	1-241-630-11	RES, ADJ, CARBON 10K					